Docket Files

FEBRUARY 12 1979

Docket No. 50-272

Mr. F. P. Librizzi, General Manager
Electric Production
Public Service Electric and Gas Company
80 Park Place
Newark, New Jersey 07101

Dear Mr. Librizzi:

The Commission has issued the enclosed Amendment No. 13 to Facility Operating License No. DPR-70 for the Salem Nuclear Generating Station Unit No. 1. The amendment consists of changes to the Appendix A and B Technical Specifications and is in partial response to your letter of December 2, 1977 and in response to your letters of April 12, August 18, September 25 and October 17, 1978. Certain minor changes from your original requests have been made which were agreed to by members of your staff.

This amendment (1) revises the surveillance requirements for fire detection instrumentation, (2) includes changes to the offsite and station organizations, and the memberships of the Station Operations Review Committee (SORC) and Nuclear Review Board (NRB), and (3) includes miscellaneous administrative changes.

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

Sincerely,

Original Signed By

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:
1. Amendment No. 13 to DPR-70
2. Safety Evaluation
3. Notice of Issuance

cc: w/enclosures
See next page

7903140518

TACS NO 7549

DSS:SA
WHaas
2/2/79

DOR:ORB2
TVWambach
2/2/79

OFFICE	DOR:ORB1	DOR:ORB1	DOR:STS	DSS:ASB	OELD	DOR:ORB1
SURNAME	GGZech:jb	CSParrish	DBrinkman	VBenaroya		ASchwencer
DATE	01/10/79	1/12/79	2/2/79	1/17/79	2/1/79	2/12/79

NRC FORM 318 (9-76) NRCM 0240

☆ U. S. GOVERNMENT PRINTING OFFICE: 1976 — 626-624

DISTRIBUTION
Docket File 50-272
NRC PDR
Local PDR
NRR Rdg
ORB1 Rdg
V. Stello H. Denton
D. Eisenhut
C. Parrish
G. Zech
OELD
I&E (5)
B. Jones (4)
B. Scharf (10)
D. Brinkman
V. Benaroya
W. Haas
B. Harless
B. Grimes
R. Diggs
C. Miles
J. Carter
TERA
J. Buchanan
T. Wambach
ACRS (16)

OFFICE ➤						
SURNAME ➤						
DATE ➤						

cc: Mark J. Wetterhahn, Esquire
Conner, Moore & Corber
Suite 1050
1747 Pennsylvania Avenue, NW
Washington, D.C. 20006

Richard Fryling, Jr., Esquire
Assistant General Solicitor
Public Service Electric & Gas Company
80 Park Place
Newark, New Jersey 07101

Gene Fisher
Bureau Chief
Bureau of Radiation Protection
380 Scotch Road
Trenton, New Jersey 08628

Public Service Electric & Gas Company
ATTN: Herbert J. Heller
Manager, Salem Nuclear Generating Station
Hancocks Bridge, New Jersey 08038

Public Service Electric & Gas Company
ATTN: Mr. R. L. Mittl
General Manager - Licensing and Environment
80 Park Place
Newark, New Jersey 07101

Salem Free Library
112 West Broadway
Salem, New Jersey 08079

Attorney General
Department of Law & Public Safety
State House Annex
Trenton, New Jersey 08625

Samuel E. Donelson, Mayor
Lower Alloways Creek Township
Municipal Hall
Hancocks Bridge, New Jersey 08038

Richard B. McGlynn, Commissioner
Department of Public Utilities,
State of New Jersey
101 Commerce Street
Newark, New Jersey 07102

State House Annex
ATTN: Deputy Attorney General
State of New Jersey
36 West State Street
Trenton, New Jersey 08625

Director, Technical Assessment Division
Office of Radiation Programs (AW-459)
U. S. Environmental Protection Agency
Crystal Mall #2
Arlington, Virginia 20460

U.S.Environmental Protection Agency
Region II Office
ATTN: EIS COORDINATOR
20 Federal Plaza
New York, New York 10007

Leif J. Norrholm
USNRC
Drawer I
Hancocks Bridge, New Jersey 08038

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. 13
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, et al. (the licensee) dated December 21, 1977 as supplemented April 12, August 18, September 25, and October 17, 1978, 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 activites 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. 13 , 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

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 12, 1979

ATTACHMENT TO LICENSE AMENDMENT NO. 13

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Revise Appendix "A" and "B" as follows. The revised pages are identified by Amendment number and vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

	Remove Existing	Insert Revised
Appendix "A"	3/4 3-49	3/4 3-49
	--------	3/4 3-50
	3/4 3-50	3/4 3-51
	3/4 3-51	3/4 3-52
	6-2	6-2
	6-3	6-3
	6-5	6-5
	6-6a	--------
	6-8	6-8
Appendix "B"	5.1-1	5.1-1
	5.2-1	5.2-1
	5.2-2	5.2-2
	5.2-3	--------
	5.2-4	--------
	v	v

INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.6 As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.3-10 shall be OPERABLE.

APPLICABILITY: Whenever equipment in that fire detection zone is required to be OPERABLE.*

ACTION:

With the number of OPERABLE fire detection instruments less than required by Table 3.3-10:

a. Within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, and

b. Restore the inoperable instrument(s) to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to OPERABLE status.

c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.6.1 Each of the above required fire detection instruments which are accessible during operation shall be demonstrated OPERABLE at least once per 6 months by performance of a functional test which includes subjecting the detector to smoke or heat, as applicable. Fire detection instruments which are not accessible during operation shall be demonstrat-

*The fire detection instruments within the containment are not required to be OPERABLE during the performance of Type A Containment Leakage Rate Tests.

SURVEILLANCE REQUIREMENTS (Continued)

ed OPERABLE by performance of this functional test during each COLD SHUTDOWN exceeding 24 hours except that such demonstration need not be performed more often than once per 6 months. A shutdown outage need not be extended solely for the performance of the fire detection instruments functional tests. The reactor coolant pump heat detectors are exempt from this requirement.

4.3.3.6.2 The circuits between the above required detection instruments and the control room shall be demonstrated OPERABLE at least once per 92 days per approved procedures.

TABLE 3.3-10

FIRE DETECTION INSTRUMENTS

Instrument Location	Installed Thermal	Installed Smoke	Min. Req'd.
1. Containment			
A. Main Coolant Pumps			
#11	2		1
#12	2		1
#13	2		1
#14	2		1
B. Iodine Removal System	1		1
C. Pressure Relief System	1		1
2. Control Room			
A. Ceiling Void		6	4
B. Control Console		2	1
C. Aux. Equip. Room		8	6
D. Computer Room		2	1
3. Cable Vaults			
#1C&D el 113		3	2
#2A&B el 113		3	2
#2C&D el 113		3	2
4. Switch Gear Rooms			
A. Relay Room el 100		18	16
B. Switch Gear el 84		18	16
C. Vital Bus el 64		18	16
D. Elec. Pent el 78		13	11
5. Battery Rooms			
A. #1A 125 V el 100	2		1
B. #1 250 V el 100	3		2
C. #1B 125 V el 100	2		1
D. #1C 125 V el 64	2		1

TABLE 3.3-10 (Continued)

FIRE DETECTION INSTRUMENTS

Instrument Location	Installed Thermal	Installed Smoke	Min. Req'd.
6. Diesel Generators			
A. #1A	5		4
B. #1B	5		4
C. #1C	5		4
7. Diesel Fuel Storage			
A. #11 Tank el 84	2		1
B. #12 Tank el 84	2		1
C. #11 Fuel Transfer Pump	1		1
D. #12 Fuel Transfer Pump	1		1
8. Aux. Bldg. Vent System - El. 122			
Elec. Penetration Area	2		2
Switch Gear Room	1		1
Relay Room & Control Room	3		3
9. Fuel Handling Bldg.			
Vent Equip. Room	3		2
Elec. Control Area	2		1
10. Diesel Gen. Control Room			
A. #11		1	1
B. #12		1	1
C. #13		1	1

6.1 RESPONSIBILITY

6.1.1 The Station Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

6.2 ORGANIZATION

OFFSITE

6.2.1 The offsite organization for facility management and technical support shall be as shown on Figure 6.2-1.

FACILITY STAFF

6.2.2 The Facility organization shall be as shown on Figure 6.2-2 and:

a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.

b. At least one licensed Operator shall be in the control room when fuel is in the reactor.

c. At least two licensed Operators shall be present in the control room during reactor start-up, scheduled reactor shutdown and during recovery from reactor trips.

d. An individual qualified in radiation protection procedures shall be on site when fuel is in the reactor.

e. All CORE ALTERATIONS after the initial fuel loading shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.

f. A Fire Brigade of at least 3 members shall be maintained onsite at all times. The Fire Brigade shall not include 4 members of the minimum shift crew necessary for safe shutdown of the unit or any personnel required for other essential functions during a fire emergency.

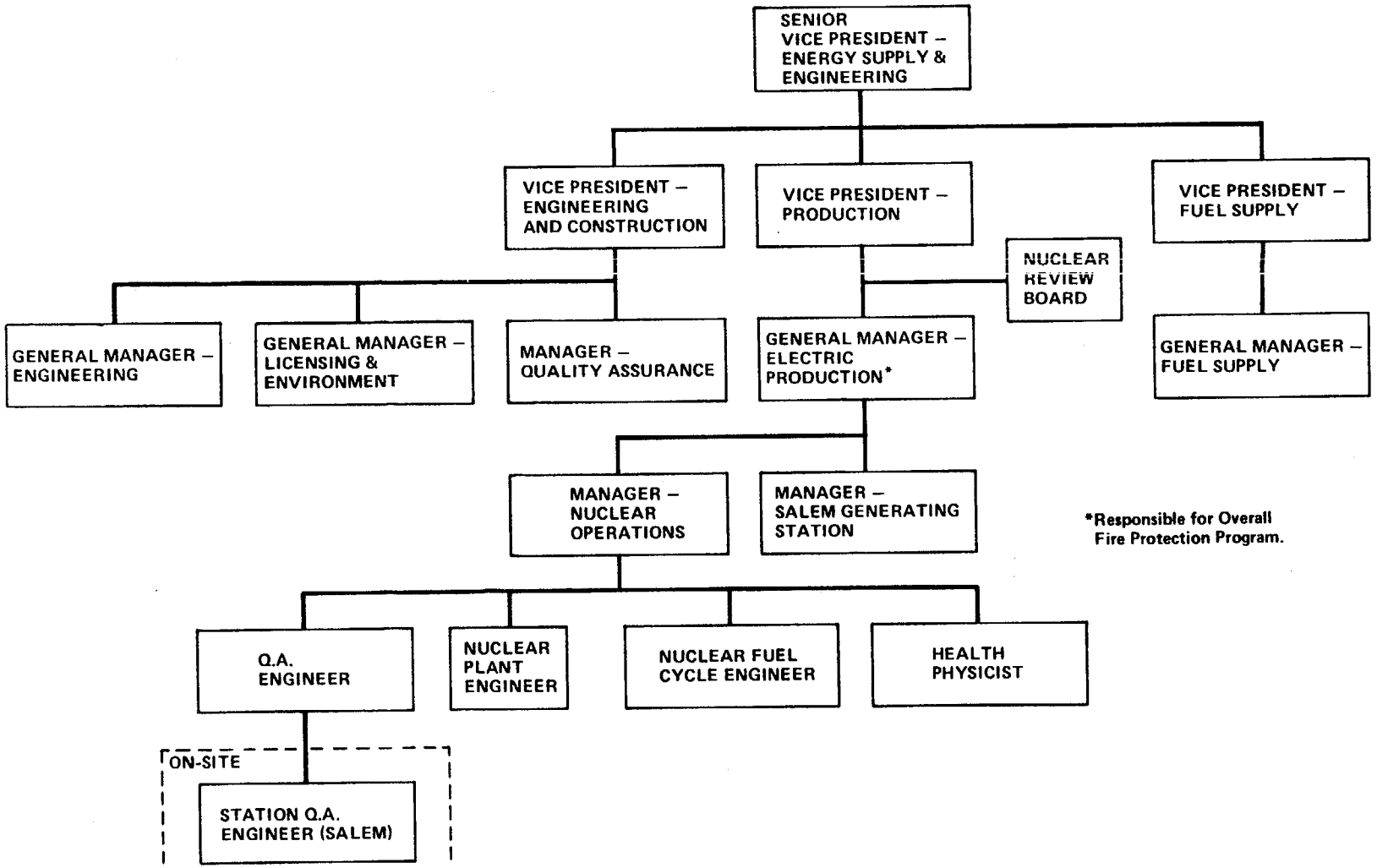
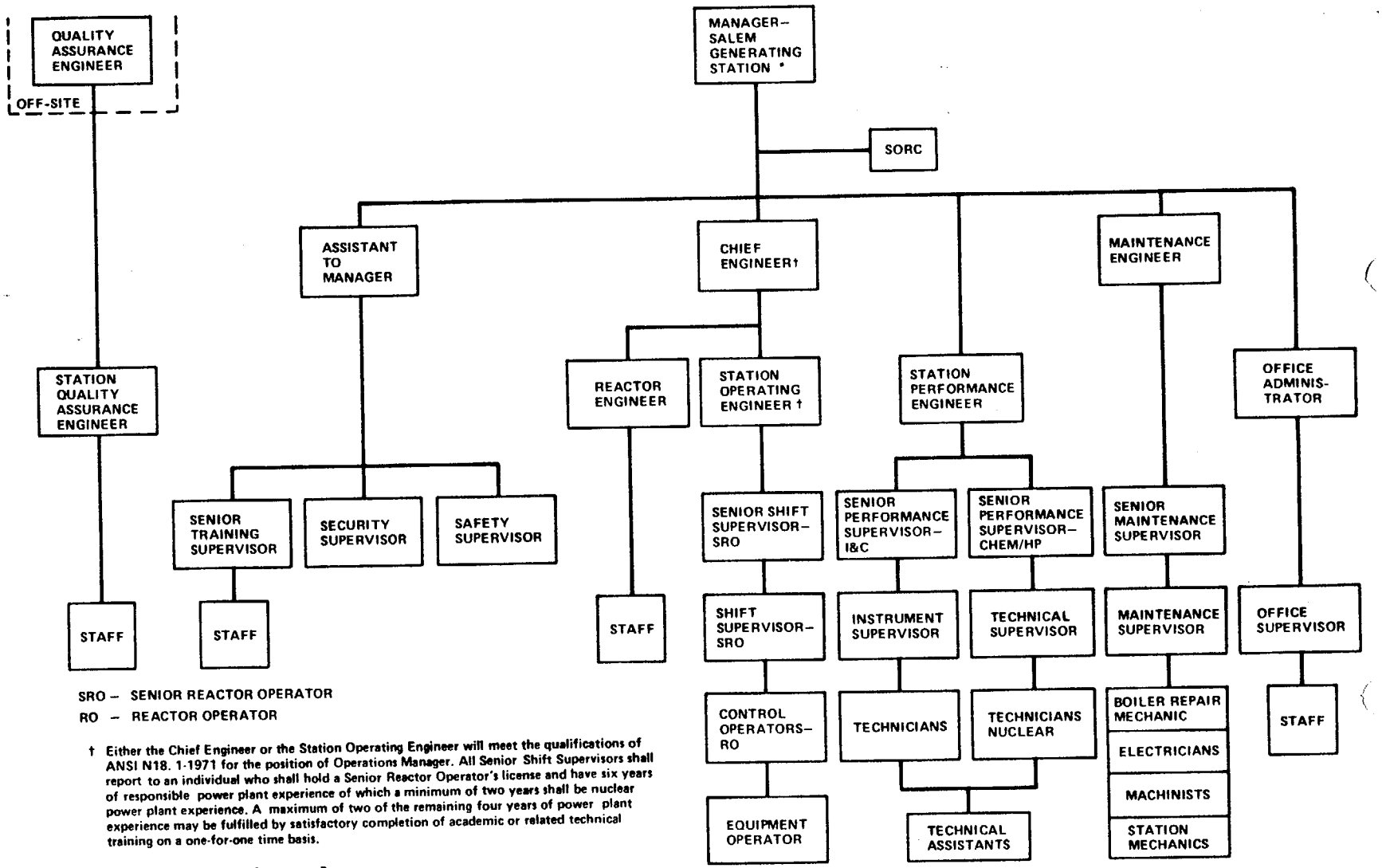


FIGURE 6.2-1. OFFSITE ORGANIZATION FOR FACILITY MANAGEMENT AND TECHNICAL SUPPORT



SRO – SENIOR REACTOR OPERATOR

RO – REACTOR OPERATOR

† Either the Chief Engineer or the Station Operating Engineer will meet the qualifications of ANSI N18. 1-1971 for the position of Operations Manager. All Senior Shift Supervisors shall report to an individual who shall hold a Senior Reactor Operator's license and have six years of responsible power plant experience of which a minimum of two years shall be nuclear power plant experience. A maximum of two of the remaining four years of power plant experience may be fulfilled by satisfactory completion of academic or related technical training on a one-for-one time basis.

* Responsible for the Fire Protection Program Implementation

FIGURE 6.2.2 FACILITY ORGANIZATION – SALEM GENERATING STATION

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION#

LICENSE CATEGORY	APPLICABLE MODES	
	1, 2, 3 & 4	5 & 6
SOL	1	1*
OL	2	1
Non-Licensed	2	1

*Does not include the licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising CORE ALTERATIONS after the initial fuel loading.

#Shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2-1.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the Senior Performance Supervisor - Chemistry/HP who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Assistant to Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55.

6.4.2 A training program for the Fire Brigade shall be maintained under the direction of the Safety Supervisor and shall meet or exceed the requirements of Section 27 of the NFPA Code-1975, except for Fire Brigade training sessions which shall be held at least quarterly.

6.5 REVIEW AND AUDIT

6.5.1 STATION OPERATIONS REVIEW COMMITTEE (SORC)

FUNCTION

6.5.1.1 The Station Operations Review Committee shall function to advise the Station Manager on all matters related to nuclear safety.

COMPOSITION

6.5.1.2 The Station Operations Review Committee shall be composed of the:

Chairman:	Chief Engineer
Vice Chairman:	Assistant to Manager
Member:	Station Operating Engineer
Member:	Station Performance Engineer
Member:	Reactor Engineer
Member:	Senior Shift Supervisor
Member:	Senior Performance Supervisor - I&C
Member:	Senior Performance Supervisor - Chem/HP
Member:	Maintenance Engineer

ALTERNATES

6.5.1.3 All alternate members shall be appointed in writing by the SORC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in SORC activities at any one time.

MEETING FREQUENCY

6.5.1.4 The SORC shall meet at least once per calendar month and as convened by the SORC Chairman or his designated alternate.

QUORUM

6.5.1.5 A quorum of the SORC shall consist of the Chairman or his designated alternate and four members including alternates.

RESPONSIBILITIES

6.5.1.6 The Station Operations Review Committee shall be responsible for:

a. Review of 1) all procedures required by Specification 6.8 and changes thereto, 2) any other proposed procedures or changes thereto as determined by the Station Manager to affect nuclear safety.

b. Review of all proposed tests and experiments that affect nuclear safety.

c. Review of all proposed changes to Appendix "A" Technical Specifications.

d. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.

e. Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence to the General Manager - Electric Production and to the Chairman of the Nuclear Review Board.

f. Review of events requiring 24 hour written notification to the Commission.

g. Review of facility operations to detect potential nuclear safety hazards.

h. Performance of special reviews, investigations or analyses and reports thereon as requested by the Chairman of the Nuclear Review Board.

i. Review of the Plant Security Plan and implementing procedures and shall submit recommended changes to the Chairman of the Nuclear Review Board.

j. Review of the Emergency Plan and implementing procedures and shall submit recommended changes to the Chairman of the Nuclear Review Board.

AUTHORITY

6.5.1.7 The Station Operations Review Committee shall:

a. Recommend to the Station Manager written approval or disapproval of items considered under 6.5.1.6(a) through (d) above.

b. Render determinations in writing with regard to whether or not each item considered under 6.5.1.6(a) through (e) above constitutes an unreviewed safety question.

c. Provide written notification within 24 hours to the General Manager-Electric Production and the Nuclear Review Board of disagreement between the SORC and the Station Manager; however, the Station Manager shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

RECORDS

6.5.1.8 The Station Operations Review Committee shall maintain written minutes of each meeting and copies shall be provided to the General Manager-Electric Production and Chairman of the Nuclear Review Board.

6.5.2 NUCLEAR REVIEW BOARD (NRB)

FUNCTION

6.5.2.1 The Nuclear Review Board shall function to provide independent review and audit of designated activities in the areas of:

a. nuclear power plant operations

b. nuclear engineering

c. chemistry and radiochemistry

d. metallurgy

e. instrumentation and control

f. radiological safety

g. mechanical and electrical engineering

h. quality assurance practices

COMPOSITION

6.5.2.2 The NRB shall be composed of the:

Chairman:	General Manager-Electric Production
Vice Chairman:	Assistant to General Manager-Fuel Supply
Member:	General Manager-Licensing and Environment
Member:	Manager-Nuclear Operations
Member:	Manager-Quality Assurance
Member:	Project Manager-Hope Creek
Member:	Manager-Salem Generating Station
Member:	Principal Engineer
Member:	Manager - Hope Creek Generating Station

ALTERNATES

6.5.2.3 All alternate members shall be appointed in writing by the NRB Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in NRB activities at any one time.

CONSULTANTS

6.5.2.4 Consultants shall be utilized as determined by the NRB Chairman to provide expert advice to the NRB.

MEETING FREQUENCY

6.5.2.5 The NRB shall meet at least once per calendar quarter during the initial year of facility operation following fuel loading and at least once per six months thereafter.

LIST OF FIGURES

5.0 ADMI STRATIVE CONTROLS

5.1 RESPONSIBILITY

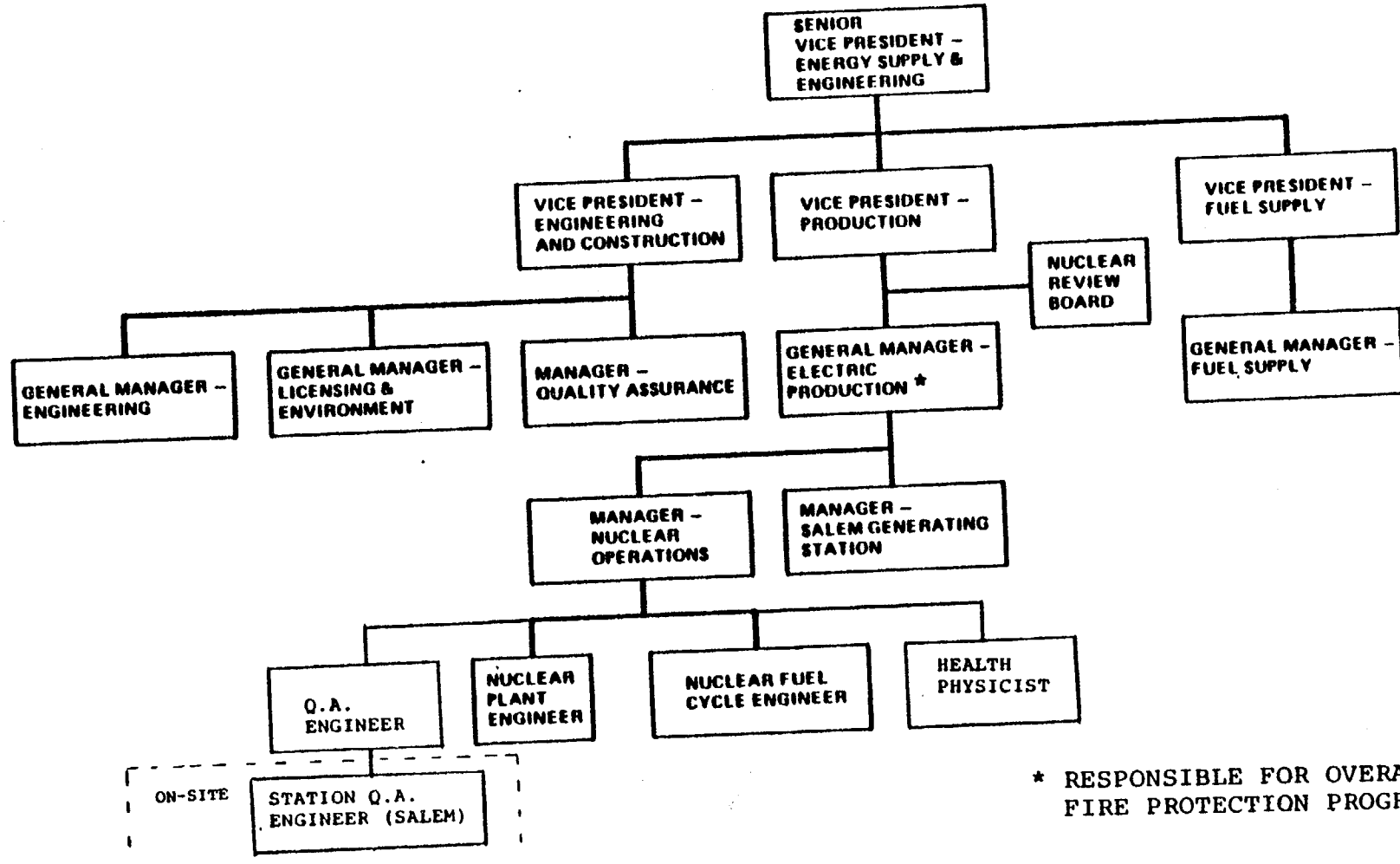
5.1.1 The implementation of the surveillance programs external to the plant, including sampling, sample analysis, evaluation of results and the preparation of required reports is the responsibility of the Licensing and Environment Department in the Engineering and Construction Department. This Department is responsible for the assignment of personnel to the above functions, for assurance that appropriate written procedures, as described in Section 5.5.1, are utilized in the surveillance program activities and for assuring the quality of surveillance program results, as described in Section 5.5.3.

5.1.2 The Station Manager or his delegated alternate is responsible for operating the plant in compliance with the limiting conditions for operation as specified in the Environmental Technical Specifications and for the in-plant monitoring necessary to ensure such operation. His responsibility includes assurance that plant activities are conducted in such a manner as to provide continuing protection to the environment and that personnel performing such activities use appropriate written procedures as described in Section 5.5.

5.2 Organization

5.2.1 Figure 5.2-1 identifies the corporate relationship between the Licensing and Environmental Department and the station Manager and also shows the organization of the Licensing and Enviromment Department. Figure 6.2.2 of the Radiological Safety Technical Specifications identifies the Production Department Station Organization.

5.2.2 The Nuclear Review Board (NRB) and Station Operations Review Committee (SORC) are shown in Figure 5.2-1. They are advisory groups to the Vice President - Production and the station Manager respectively.



* RESPONSIBLE FOR OVERALL FIRE PROTECTION PROGRAM

FIGURE 5.2-1
OFFSITE ORGANIZATION FOR FACILITY MANAGEMENT AND TECHNICAL SUPPORT

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 13 TO FACILITY OPERATING LICENSE DPR-70

PUBLIC SERVICE ELECTRIC AND 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

Introduction

By letters dated December 21, 1977, April 12, August 18, September 25, and October 17, 1978, Public Service Electric and Gas Company (PSE&G) proposed changes to the Technical Specifications appended to Operating License No. DPR-70 for the Salem Nuclear Generating Station Unit No. 1. The proposed changes would (1) revise the organization charts as contained in Figures 6.2-1 and 6.2-2 of the Appendix A Technical Specifications and Figures 5.2-1 of the Appendix B Technical Specifications, (2) revise the membership of the Station Operations Review Committee (SORC) and Nuclear Review Board (NRB), (3) modify certain surveillance requirements for fire detection instrumentation, and (4) make miscellaneous administrative changes.

Background

The licensee has proposed to revise the organization charts in Figures 6.2-1 and 6.2-2 and Figure 5.2-1 of the Appendix A and Appendix B Technical Specifications, respectively, to reflect recent changes in the station and offsite organizations and to add a note with regard to Senior Reactor Operator (SRO) requirements. Specifically, these changes are:

1. The Assistant to Manager at the Salem Station is now responsible for administration of the Safety and Security Programs in addition to the Training Program;

2. The reassignment of the Station Quality Assurance Engineer from reporting to the Manager - Salem Generating Station to reporting to the Quality Assurance Engineer;

3. Either the Chief Engineer or the Station Operating Engineer will meet the qualifications of ANSI N18.1-1971 for the position of Operations Manager. All Senior Shift Supervisors shall report to an individual who shall hold a Senior Reactor Operator's license and have six years of responsible power plant experience of which a minimum of two years shall be nuclear power plant experience. A maximum of two of the remaining four years of power plant experience may be fulfilled by satisfactory completion of academic or related technical training on a one-for-one time basis.

4. The implementation of the environmental surveillance programs is now the responsibility of the Licensing and Environment Department in the Engineering and Construction Department rather than the Nuclear Licensing and Environmental Studies Group in the Mechanical Division of the Engineering Department.

In addition, the licensee has proposed the following changes for the SORC and NRB memberships:

1. Revise the SORC Organization to designate the Assistant to Manager as Vice Chairman and designate the Maintenance Engineer as a member;

2. Revise the NRB Organization to add the Manager - Hope Creek as a member;

3. Revise Paragraph 6.4.1 to indicate the Assistant to Manager is responsible for facility retraining and replacement training rather than the Chief Engineer.

The licensee has also proposed to revise the frequency from once per 31 days to once per 12 months for demonstrating operability of the circuits between the fire detection instruments and the control room.

Evaluation

Organizational Changes

We have evaluated the licensee's requests to update the offsite and station organizational charts to reflect recent organization changes and have concluded that these changes are administrative in nature

and do not involve revisions to personnel qualification requirements other than those allowed by ANSI N 18.1, as applicable. In addition, the changes to create the position of Quality Assurance Engineer in the offsite organization and to require that the Station Quality Assurance Engineer report to that individual rather than to the Manager - Salem Generating Station is acceptable in that the Quality Assurance Engineer position is a senior-level position within the offsite organization reporting to the Manager - Nuclear Operations.

SORC and NRB Membership Changes

We have evaluated the proposed changes to the membership of the SORC and NRB and have concluded that these changes are administrative in nature, do not involve any changes in the qualification requirements of members, and are therefore acceptable. It is further noted that the addition of the Manager - Hope Creek as a member of the NRB organization enhances the expertise of the staff with regard to issues that may potentially involve Hope Creek as well as the Salem Station.

Fire Detection Equipment Surveillance Changes

On February 14, 1978, we issued Amendment No. 11 to the Salem operating license which implemented interim fire protection Technical Specifications. Included in this amendment was the surveillance requirement that the circuits between the control room and the unit's remote fire detection instrumentation be demonstrated operable at least once per 31 days. In its letter of April 12, 1978, the licensee indicated that in order to demonstrate that the 148 circuits involved are operable, the leads for each detection instrument must be disconnected because Salem is not equipped with automatic circuit checking devices or manual switches. To avoid undue equipment wear, the licensee requested that the surveillance interval be changed from once per 31 days to once per 12 months.

By letter dated July 24, 1978, we advised the licensee that unless the Salem Station were to be equipped with fire detection circuits that fully meet NFPA Code 720 Standards for Class A supervised circuits, the proposed 12 month surveillance interval would not be

acceptable. This was based on the fact that the current surveillance requirements for facilities meeting the above referenced standards include demonstrating that the fire detection instruments are operable once per 6 months and that the supervised circuits themselves be demonstrated operable at least once per 6 months. However, since the Salem Station fire detector circuit design does include certain supervisory features such as monitoring for shorts or open circuits, and since too frequent disconnection of detector leads could cause undue equipment wear, thereby leading to less reliable fire detection equipment, we indicated to the licensee that a surveillance interval of once per 92 days for the fire detection circuits would be acceptable. By letter dated August 18, 1978 the licensee agreed to this change.

In our letter of July 24, 1978, we also indicated to the licensee that the Salem Station interim fire protection Technical Specifications issued on February 14, 1978 did not include the requirement to specifically test the fire detection instrumentation. The Technical Specifications, as issued, require that a channel functional test be performed at least once per 6 months, but since the definition of a channel functional test, as contained in the Salem Technical Specifications, does not necessarily include the detector itself, the detector should be included. In its letter of August 18, 1978, the licensee proposed to modify the Technical Specifications to require that fire detection instruments which are accessible during operation be demonstrated operable at least once per 6 months by performance of a functional test which includes subjecting the detector to smoke or heat, as applicable. Fire detection instruments which are not accessible during operation would be demonstated operable by performance of this functional test during each cold shutdown exceeding 24 hours except that such demonstration need not be performed more often than once per 6 months. The licensee requested that the reactor coolant pump heat detectors be exempt from this requirement because these detectors are of the fusible link type and subjecting them to a test opens the link, necessitating replacement of the detector.

We agree with the licensee that testing of the reactor coolant pump detectors should not be required. We have further concluded that a shutdown outage need not be extended solely for the performance

of the fire detection instrument functional tests and that the fire detection instruments within the containment are not required to be operable during the performance of Type A containment leakage rate tests. The basis for the latter of the above two findings is discussed below.

In accordance with the Technical Specifications of the Salem Unit 1 plant and the Appendix J to 10 CFR Part 50, the Containment Building must be periodically pressurized and tested for leakage to verify that any leakage from the building under accident conditions will be within the limits assumed for the analysis of that accident. When the Containment Building atmosphere is pressurized, the fire detectors (ionization chambers) give false fire alarms because the ionization chamber current is affected by the density of the air. With the detectors in the alarmed condition, they are inoperable, i.e., unable to provide an alarm to the operators in the event of a fire in that detector's zone. The existing Technical Specification requires that, when the number of operable fire detectors in the Containment Building falls below the minimum number specified, a fire watch patrol must inspect that zone within one hour and every four hours thereafter until the required number of detectors are returned to an operable status. During the integrated leakage test (when the detector can give false alarms) the Containment Building is pressurized to 52 psig and personnel are not allowed in the building for reasons of personal safety.

However, since for this leakage test the reactor is in the cold shutdown condition, the consequences of the effects of any fire on safe shutdown capability or release of radioactivity is greatly reduced. In addition, during the performance of the leakage test, very sensitive temperature and pressure detectors are installed in various areas of the building to determine the building leakage rate. These detectors would serve in a backup capability to indicate the course of leakage test. For these reasons, we have concluded that during this period it is acceptable for the installed fire detectors (ionization chambers) to be inoperable.

Considering all the factors involved, we have concluded that the changes to the fire protection system surveillance requirements, as discussed above, will result in an improved level of protection for the Salem Unit 1 facility.

Miscellaneous Administrative Changes

In Amendment No. 6 issued on July 7, 1977, we included a provision to Specification 6.3.1, Facility Staff Qualifications, which waived for one year, the requirement that the Maintenance Engineer have at least one year of nuclear experience. Since the one year period has elapsed, this provision is now being removed from the Technical Specifications.

Since the implementation of the environmental surveillance program is now the responsibility of the Engineering and Construction Department rather than the Mechanical Division of the Engineering Department as discussed above, Figure 5.2-2 in the Appendix B Technical Specifications which identifies the organization of the latter department, is no longer necessary and is being removed by this amendment. In addition, Figure 5.2-3 in the Appendix B Technical Specifications which identifies the Salem Station organization is a duplication of Figure 6.2-2 of the Appendix A Technical Specifications and is therefore being removed by this amendment, with a reference to Figure 6.2-2 being added in Section 5.2.1 of the Appendix B Technical Specifications.

Environmental Consideration

We have determined that this 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 accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards coinsideration, (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: February 12, 1979

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-272

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

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 13 to Facility Operating License No. DPR-70, issued to Public Service Electric and Gas Company, et al. (the licensee), which revise the Technical Specifications for the Salem Nuclear Generating Station, Unit No. 1 located in Salem County, New Jersey. The amendment is effective as of its date of issuance.

The amendment (1) revises the surveillance requirements for fire detection instrumentation, (2) includes changes to the offsite and station organizations, and the memberships of the Station Operations Review Committee (SORC) and Nuclear Review Board (NRB) and (3) includes miscellaneous administrative changes.

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.

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, negative declaration or 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 December 21, 1977 as supplemented April 12, August 18, September 25, and October 17, 1978, (2) Amendment No. 13 to License No. DPR-70 and (3) the Commission's related Safety Evaluation. 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 Public Library, 112 West Broadway, Salem, New Jersey 08079. 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 Operating Reactors.

Dated at Bethesda, Maryland, this 12th day of February, 1979.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors