

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. 175 License No. DPR-70

- 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 May 2, 1995, 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.
- 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. 175 , 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

John F. Stolz, Director Project Directorate 1-2

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: September 6, 1995

FACILITY OPERATING LICENSE NO. DPR-70 DOCKET NO. 50-272

Revise Appendix A as follows:

e Pages	Insert	Pages
3-20a	3/4	3-20a
3-22	3/4	3-22
3-26	3/4	3-26
3-33	3/4	3-33
3-34	3/4	3-34
	e Pages 3-20a 3-22 3-26 3-33 3-34	3-20a 3/4 3-22 3/4 3-26 3/4 3-33 3/4

TABLE 3.3-3 (Contined) ENGINEERED SAFETY FEATURE ACTUATION STEM INSTRUMENTATION

FUI	CTIC	ONAL UNIT	TOTAL NO OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
8.	AU	UXILIARY FEEDWATER					
	a.	Automatic Actuation Logic **	2	1	2	1,2,3	20
	b.	NOT USED					
	c.	Steam Generator Water LevelLow	-Low				
		i. Start Motor Driven Pumps	3/stm. gen.	2/stm. gen. any stm.gen.	2/stm.gen.	1,2,3	19*
		ii.Start Turbine Driven Pumps	3/stm. gen.	2/stm. gen. any 2 stm.gen.	2/stm.gen.	1,2,3	19*
	d.	Undervoltage - RCP Start Turbine - Driven Pump	4-1/bus	1/2 × 2	3	1,2	19
	e.	S.1. Start Motor-Driven Pumps	See 1 abov	e (All S.I. init	tiating fund	ctions and r	requirements)
	f.	Trip of Main Feedwater Pumps Start Motor Driven Pumps	2/pump	1/pump	1/pump	1,2	21*
	g.	Station Blackout	See 6 and 7	above (SEC and	U/V Vital E	Bus)	

- ACTION 19 With the number of OPERABLE Channels one less than the Total Number of Channels, STARTUP and/or POWER CPERATION may proceed provided the following conditions are satisfied:
 - a. The inoperable channel is placed in the tripped condition within 6 hours.
 - b. The Minimum Channels OPERABLE requirements is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.2.1.1.
- ACTION 20 With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 6 hours or, be in at least HOT STANDBY within the next 6 hours and in at least HOT SHUTDOWN within the following 6 hours; however, one channel may be bypassed for up to 4 hours for surveillance testing per Specification 4.3.2.1.1 provided the other channel is OPERABLE.
- ACTION 21 With the number of OPERABLE channels one less than the Minimum Number of Channels, operation may proceed provided that either:
 - a. The inoperable channel is restored to OPERABLE within 72 hours, or
 - b. If the affected Main Feedwater Pump is expected to be out of service for more than 72 hours, the inoperable channel is jumpered so as to enable the Start Circuit of the Auxiliary Feedwater Pumps upon the loss of the other Main Feedwater Pump.
- ACTION 22 NOT USED
- ACTION 23 With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or be in HOT STANDBY within the 6 hours and in at least HOT SHUTDOWN within the following 6 hours.

TABLE 3.3-4 (continued) ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

F	UNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
5	. TURBINE TRIP AND FEEDWATER ISOLATION		
	A. Steam Generator Water Level High-High	≤ 67% of narrow range instrument span each steam generator	<pre>5 68% of narrow range instrument span each steam generator</pre>
6	. SAFEGUARDS EQUIPMENT CONTROL SYSTEM (SEC)	Not Applicable	Not Applicable
7	. UNDERVOLTAGE, VITAL BUS		
	a. Loss of Voltage	≥ 70% of bus voltage	≥ 65% of bus voltage
	b. Sustained Degraded Toltage	≥ 94.6% of bus voltage for ≤ 13 seconds	≥ 94% of bus voltage for ≤ 15 seconds
8	. AUXILIARY FEEDWATER		
	a. Automatic Actuation Logic	Not Applicable	Not Applicable
	b. NOT USED		
	c. Steam Generator Water Level Low-Low	≥ 9.0% of narrow range instrument span each steam generator	≥ 8.0% of narrow range instrument span each steam generator
	d. Undervoltage - RCP	≥ 70% RCP bus voltage	≥ 65% RCP bus voltage
	e. S.I.	See 1 above (All S.I. setpoi	nts)
	f. Trip of Main Feedwater Pumps	Not Applicable	Not Applicable
	g. Station Blackout	See 6 and 7 above (SEC and U	ndervoltage, Vital Bus)
S	SALEM - UNIT 1	3/4 3-26	Amendment No. 175

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUN	CTIC	ONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
8.	AUX	KILIARY FEEDWATER				
	a.	Automatic Actuation Logic	N.A.	N.A.	M(2)	1,2,3
	b.	NOT USED				
	c.	Steam Generator Water LevelLow-Low	s	R	Q	1,2,3
	d.	Undervoltage - RCP	s	R	Q	1,2
	e.	S.I.	See 1 abo	ve (All S.I. sur	veillance req	uirements)
	£.	Trip of Main Feedwater Pumps	N.A.	N.A.	R	1
	g.	Station Blackout	See 6b an	d 7 above (SEC a	nd U/V Vital	Bus)

TABLE NOTATION

- * Outputs are up to, but not including, the output relays.
- (1) Each logic channel shall be tested at least once per 62 days on a STAGGERED TEST BASIS. The CHANNEL FUNCTION TEST of each logic channel shall verify that its associated diesel generator automatic load sequence timer is OPERABLE with the interval between each load block within 1 second of its design interval.
- (2) Each train or logic channel shall be tested at least every 62 days on a staggered basis.
- (3) The CHANNEL FUNCTIONAL TEST shall include exercising the transmitter by applying either a vacuum or pressure to the appropriate side of the transmitter.
- (4) NOT USED
- (5) NOT USED
- (6) Inputs from Undervoltage, Vital Bus, shall be tested monthly. Inputs from Solid State Protection System shall be tested every 62 days on a STACGERED TEST BASIS.



UNITED STATES NUCLEAR REGULATORY COMMISSION

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PUBLIC SERVICE ELECTRIC & GAS COMPANY PHILADELPHIA ELECTRIC COMPANY DELMARVA POWER AND LIGHT COMPANY ATLANTIC CITY ELECTRIC COMPANY DOCKET NO. 50-311

SALEM NUCLEAR GENERATING STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 156 License No. DPR-75

- 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 May 2, 1995, 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.
- 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-75 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. 156, 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

John F. Stolz, Director Project Directorate 1-2

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: September 6, 1995

FACILITY OPERATING LICENSE NO. DPR-75 DOCKET NO. 50-311

Revise Appendix A as follows:

Remove Pages	Insert Pages
3/4 3-21	3/4 3-21
3/4 3-23	3/4 3-23
3/4 3-27	3/4 3-27
3/4 3-36	3/4 3-36
3/4 3-37	3/4 3-37

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUN	CTI	ONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	CHANNELS OPERABLE	APPLICABLE MODES	ACTION
8.	AU	XILIARY FEEDWATER					
	a.	Automatic Actuation Logic **	2	1	2	1,2,3	20
	b.	NOT USED					
	c.	Stm. Gen. Water Level-Low-Low					
		i. Start Motor Driven Pumps	3/stm. gen.	2/stm. gen. any stm. gen.	2/stm. gen.	1,2,3	19*
		ii. Start Turbine Driven Pumps	3/stm. gen.	2/stm gen. any 2 stm.gen	2/stm. gen.	1,2,3	19*
	d.	Undervoltage - RCP Start Turbine - Driven Pump	4-1/bus .	1/2 x 2	3	1,2	19
	e.	S.I. Start Motor-Driven Pumps	See 1 ab	ove (All S.I. in	itiating functi	ons and require	ements)
	f.	Trip of Main Feedwater Pumps Start Motor-Driven Pumps	2/pump	1/pump	1/pump	1,2	21*
	g.	Station Blackout	See 6 an	nd 7 above (SEC a	nd UV Vital Bus)	
9.	SEN	MIAUTOMATIC TRANSFER TO RECIRCUL	LATION				
	a.	RWST Level Low	4	2	3	1,2,3	16
	b.	Automatic Actuation Logic	2	1	2	1,2,3	20

- ACTION 19 With the number of OPERABLE Channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:
 - a. The inoperable channel is placed in the tripped condition within 6 hours.
 - b. The Minimum Channels OPERABLE requirements is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.2.1.1.
- ACTION 20 With the number of OPERABLE Channels one less than the Total Number of Channels, restore the inoperable channel to operable status within 6 hours or, be in at least HOT STANDBY within the next 6 hours and in at least HOT SHUTDOWN within the following 6 hours; however, one channel may be bypassed for up to 4 hours for surveillance testing per Specification 4.3.2.1.1 provided the other channel in OPERABLE.
- ACTION 21 With the number of OPERABLE channels one less than the Minimum Number of Channels, operation may proceed provided that either:
 - a. The inoperable channel is restored to OPERABLE within 72 hours.
 - b. If the affected Main Feedwater Pump is expected to be out of service for more than 72 hours, the inoperable channel is jumpered so as to enable the Start Circuit of the Auxiliary Feedwater Pumps upon loss of the other Main Feedwater Pump.
- ACTION 22 NOT USED
- ACTION 23 With the number of OPERABLE Channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.

TABLE 3.3-4

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

FU	NCTIO	NAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
7.	UND	ERVOLTAGE, VITAL BUS		
	a.	Loss of Voltage	≥ 70% of bus voltage	≥ 65% of bus voltage
	b.	Sustained Degraded Voltage	≥ 94.6% of bus voltage for ≤ 13 seconds	≥ 94% of bus voltage for ≤ 15 seconds
8.	AUX	ILIARY FEEDWATER		
	a.	Automatic Actuation Logic	Not Applicable	Not Applicable
	b.	NOT USED		
	c.	Steam Generator Water Level Low-Low	≥ 9.0% of narrow range instrument span each steam generator	≥ 8.0% of narrow range instrument span each steam generator
	d.	Undervoltage - RCP	≥ 70% RCP bus voltage	≥ 65% RCP bus voltage
	e.	S.I.	See 1 above (all S.I. setpoints)	
	f.	Trip of Main Feedwater Pump	Not Applicable	Not Applicable
	g.	Station Blackout	See 6 and 7 above (SEC and Under	voltage, Vital Bus)
9.	SEM	IAUTOMATIC TRANSFER TO RECIRCULATION		
	а.	RWST Low Level	15.25 ft. above Instrument taps	15.25 ± 1 ft. above instrument taps
	b.	Automatic Actuation Logic	Not Applicable	Not Applicable

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUI	NCTIO	NAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
8.	AUX	ILIARY FEEDWATER				
	a.	Automatic Actuation Logic	N.A.	N.A.	M(2)	1,2,3
	b.	NOT USED				
	c.	Steam Generator Water LevelLow-Low	s	R	Q	1,2,3
	d.	Undervoltage - RCP	s	R	Q	1,2
	e.	s.I.	See 1 abo	ove (All S.I. surve	eillance requirem	ents)
	f.	Trip of Main Feedwater Pumps	N.A.	N.A.	S/U(4)	1,2
	g.	Station Blackout	See 6 and	d 7 above (SEC and	U/V Vital Bus)	
9.	SEMI	AUTOMATIC TRANSFER TO RECIRCUL	ATION			
a.	RWST	Low Level	s	R	Q	1,2,3
b.	Auto	omatic Initiation Logic	N.A.	N.A.	N.A.	1,2,3,4

TABLE NOTATION

- * Outputs are up to, but not including, the Output Relays.
- (1) Each logic channel shall be tested at least once per 62 days on a STAGGERED TEST BASIS. The CHANNEL FUNCTION TEST of each logic channel shall verify that its associated diesel generator automatic load sequence timer is OPERABLE with the interval between each load block within 1 second of its design interval.
- (2) Each train or logic channel shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (3) The CHANNEL FUNCTIONAL TEST shall include exercising the transmitter by applying either a vacuum or pressure to the appropriate side of the transmitter.
- (4) If not performed in the previous 92 days.
- (5) NOT USED
- (6) Inputs from undervoltage, Vital Bus, shall be tested monthly. Inputs from Solid State Protection System, shall be tested every 62 days on a STAGGERED TEST BASIS.