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

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

DOCKET NO. 50-277

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 101
License No. DPR-44

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Philadelphia Electric Company, et al. (the licensee) dated March 24, 1981, as supplemented by letters dated August 6, 1981, December 13, 1982, June 22, 1983, September 14, 1983, and January 26, 1984, 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-44 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 101, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Rivenbark, Acting Chief
Operating Reactors Branch No. 4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 2, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 101

FACILITY OPERATING LICENSE NO. DPR-44

DOCKET NO. 50-277

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain a vertical line indicating the area of change.

Remove	Insert
234a	234a
234b	234b
234c	234c
234d	234d
234e	234e
234f	234f
234g	234g
234h	234h
234i	234i
234j	234j
234k	234k
2341	2341
234m	234m
234n	234n
234o	234o
	234p
	234q
	234r
	234s
235a	235a
236a	236a
236b	236b

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS

3.11.D. Shock Suppressors (Snubbers) on Safety Related Systems

3.11.D.1 During all modes of operation all snubbers listed in Table 3.11.D.1 shall be operable except as noted in 3.11.D.2 and 3.11.D.3 below.

3.11.D.2 During operation in the cold shutdown or refueling modes, snubbers located on system required to be operable shall be operable except as noted in 3.11.D.3.

3.11.D.3 With one or more snubbers inoperable, within 72 hours, replace or restore the inoperable snubber to the operable status and perform an engineering evaluation per specification 4.11.D.6. If these requirements cannot be met, declare the supported system inoperable and follow the applicable Limiting Condition for Operation for that System.

4.11.D. Shock Suppressors (Snubbers) on Safety Related Systems

4.11.D.1

Snubbers listed in Table 3.11.D.1 shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.6.G.

4.11.D.2

Snubbers listed in Table 3.11.D.1 shall be visually inspected according to the following schedule.

No. of Snubbers Found Inoperable During Inspection Period	Next Visual Inspection Period
0	18 mo. ± 25%
1	12 mo. ± 25%
2	6 mo. ± 25%
3,4	4 mo. ± 25%
5,6,7	2 mo. ± 25%
8 or more	1 mo. ± 25%

The required inspection interval shall not be lengthened more than one step at a time. The provisions for extending surveillance frequency included in Section 1.0 Definitions do not apply. Snubbers may be categorized in two groups, "accessible" or "inaccessible", based on their accessibility for inspection during reactor operation. These two groups may be inspected independently according to the above schedule.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.11.D.4 Snubbers may be added to safety related systems without prior License Amendment to Table 3.11.D.1 provided that a revision on Table 3.11.D.1 is included with the next License Amendment request.	4.11.D.3 The visual inspection shall verify that 1) there are no indications of damage or impaired operability, 2) attachments are secure, and 3) there is freedom of movement if this can be verified without disconnecting the snubber. Snubbers which appear to be inoperable may be made operable for the purpose of establishing the next visual inspection interval, providing that 1) the cause of the rejection is clearly established and remedied for that particular snubber and for other generically susceptable snubbers; and 2) the affected snubber is functionally tested in the as found condition and determined operable per Specification 4.11.D.7 or 4.11.D.8, as applicable. When the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined to be inoperable for the purpose of establishing the next visual inspection interval. 4.11.D.4 Functional Test a) Once each operating cycle, during shutdown, a representative sample of 10% of each type of (mechanical or hydraulic) snubber shall be functionally tested either in place or in a bench test. For every unit found to be inoperable an additional 10% of that type of snubber shall be functionally tested until no more failures are found or all snubbers of that type have been tested. The functional test requirement for mechanical snubbers will not take effect

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
	until the first refueling outage commencing one year after approval, by the NRC, of this Technical Specification amendment. b) The representative sample selected for functional testing shall include various configurations, operating environments, sizes, and capacities of snubbers. At least 25% of the sample shall include snubbers from the following categories: 1. The first snubber away from each reactor nozzle. 2. Snubbers within five feet of heavy equipment (valves, pumps, turbines, motors) 3. Snubbers connected to safety/relief valve discharge piping within 10 feet of the valve. c) If any snubber selected for functional test either fails to lock up or fails to move, the cause shall be evaluated and if the failure is caused by manufacturing or design deficiency, all snubbers of the same design subject to the same defect shall be functionally tested. This testing requirement is independent of the requirements above for snubbers not meeting the functional test acceptance criteria. d) Snubbers which are especially difficult to remove (as identified in Table 3.11.D.1) or are in high radiation areas during shutdown (dose greater than 100 mrem/hour) shall be included in the representative sample except for those snubbers specifically exempted by the NRC.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
	4.11.D.5 In addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next testing cycle. If such a failed snubber was replaced, both the replacement snubber and the repaired snubber (if it had been repaired and installed in another position) shall be retested. The test results of these snubbers may not be included for the resampling of 4.11.D.4.a. 4.11.D.6 For snubbers found inoperable, an engineering evaluation shall be performed to determine a) mode of failure, and b) if there is any adverse effect on the supported piping or components due to the snubber inoperability. 4.11.D.7 Hydraulic Snubbers Functional Test Criteria: Functional test shall verify that: a) Restraining action is achieved within specified range of velocity or acceleration in both compression and tension. b) Snubber bleed rate is within the specified range in both tension and compression. Snubbers specifically required not to displace under continuous load shall have this capability verified.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
	4.11.D.8 Mechanical Snubber Functional Test Criteria: Functional tests shall verify that: a) The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force. Drag force shall not have increased more than 50% since the last functional test. b) Restraining Action is achieved within the specified range of velocity or acceleration in both tension and compression. c) Snubber release rate, where required, is within the specified range in compression or tension. Snubbers specifically required not to displace under continuous load shall have this capability verified. 4.11.D.9 Service Life Monitoring A record of the service life of each snubber listed in Table 3.11.D.1, the date of commencement of service life, (January 1, 1978, unless otherwise specified) and the installation and maintenance records upon which the service life is based shall be maintained. Once each operating cycle, these records shall be reviewed to verify that no snubber service life shall be exceeded prior to the next review. If the service life will be exceeded then either recondition or replace the snubbers or re-evaluate the service life.

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
1-GG-S-1	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-2	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-3	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-4	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-5	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-6	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-7	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-8	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-9	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-10	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-11	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-12	MSRV	Drywell	135	"	N	Y	H
1-GG-S-13	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-14	MSRV	Drywell	135	"	N	Y	H
1-GG-S-15	MSRV	Drywell	135	"	Y	Y	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM	ELEVATION	HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
1-GG-S-16	MSRV	Drywell	135	"	N	Y	H
1-GG-S-17	MSRV	Drywell	135	"	N	Y	H
1-GG-S-18	MSRV	Drywell	135	"	N	Y	H
1-GG-S-19	MSRV	Drywell	135	"	N	Y	H
1-GG-S-20	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-21	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-22	MSRV	Drywell	135	"	N	Y	H
1-GG-S-23	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-24	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-25	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-26	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-27	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-28	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-29	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-30	MSRV	Drywell	155	"	Y	Y	

TABLE 3.11.D.1

Safety Related Snock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM AND ELEVATION		HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
1-GG-S-31	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-32	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-33	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-34	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-35	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-36	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-63	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-64	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-65	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-66	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-67	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-68	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-69	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-72	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-74	MSRV	Drywell	155	"	Y	Y	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM AND ELEVATION		HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
1-GG-S-75	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-76	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-77	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-78	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-79	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-80	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-81	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-82	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-83	MSRV	Drywell	155	"	Y	Y	H
SS-A-1	Main Steam	Drywell	155	"	Y	Y	H
SS-A-3	Main Steam	Drywell	155	"	Y	Y	H
SS-B-1	Main Steam	Drywell	155	"	Y	Y	H
SS-B-3	Main Steam	Drywell	155	"	Y	Y	H
SS-B-4	Main Steam	Drywell	155	"	Y	Y	H
SS-B-5	Main Steam	Drywell	155	"	Y	Y	H

TABLE 3.11.D.1

Safety Related Snock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
SS-b-6	Main Steam	Drywell	155	"	Y	Y	H
SS-C-1	Main Steam	Drywell	155	"	Y	Y	H
SS-C-3	Main Steam	Drywell	155	"	Y	Y	H
SS-C-4	Main Steam	Drywell	155	"	Y	Y	H
SS-C-5	Main Steam	Drywell	155	"	Y	Y	H
SS-C-6	Main Steam	Drywell	155	"	Y	Y	H
SS-D-1	Main Steam	Drywell	155	"	Y	Y	H
SS-D-3	Main Steam	Drywell	155	"	Y	Y	H
SS-1-A	RECIRC	Drywell	120	"	Y	Y	H
SS-1-B	RECIRC	Drywell	120	"	Y	Y	H
SS-2-A	RECIRC	Drywell	130	"	Y	Y	H
SS-2-B	RECIRC	Drywell	130	"	Y	Y	H
SS-3-A	RECIRC	Drywell	140	"	Y	Y	H
SS-3-B	RECIRC	Drywell	140	"	Y	Y	H
SS-3-C	RECIRC	Drywell	140	"	Y	Y	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
SS-3-D	RECIRC	Drywell	140	"	Y	Y	H
SS-5-A	RECIRC	Drywell	150	"	Y	Y	H
SS-5-B	RECIRC	Drywell	150	"	Y	Y	H
SS-5-C	RECIRC	Drywell	150	"	Y	Y	H
SS-5-D	RECIRC	Drywell	150	"	Y	Y	H
SS-6-A	RECIRC	Drywell	130	"	Y	Y	H
SS-6-B	RECIRC	Drywell	130	"	Y	Y	H
H-3LS-142-1	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-2	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-3	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-4	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
H-3LS-142-5	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-6	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-7	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-8	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
6-DDRL-S-5	Feedwater	Drywell	168	"	Y	Y	H
6-DDRL-S-6	Feedwater	Drywell	168	"	Y	Y	H
6-DDRL-S-7	Feedwater	Drywell	168	"	Y	Y	H
6-DDRL-S-8	Feedwater	Drywell	168	"	Y	Y	H
6-DDRL-S-9	Feedwater	Drywell	168	"	Y	Y	H
6-DDRL-S-10	Feedwater	Drywell	168	"	Y	Y	H
6-DDRL-S-11	Feedwater	Drywell	155	"	Y	Y	H

TABLE 3.11.D.1
Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM AND LOCATION ELEVATION	HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
		See 4.11.D.4.d.			
6-DDNL-S-12	Feedwater Drywell 155	"	Y	Y	H
6-DDNL-S-13	Feedwater Drywell 155	"	Y	Y	H
6-DDNL-S-14	Feedwater Drywell 155	"	Y	Y	H
9-HB-H51	Torus Vac. Bkr. 116	"	N	N	M
9-HB-H54	Torus Vac. Bkr. 116	"	N	N	M
10-HB-S-1	RHR Torus Room 93	"	N	N	H
10-HB-S-2	RHR Torus Room 93	"	N	N	H
10-HB-S-7	RHR B RHR Room 124	"	N	N	H
10-HB-S-8	RHR Torus Room 93	"	N	N	H
10-GB-S-12	RHR C RHR Room 98	"	N	N	H
10-GB-S-43-1	RHR Torus Room 130	"	Y	N	H
10-GB-S-43-2	RHR Torus Room 130	"	Y	N	H
10-GB-S-44	RHR Torus Room 128	"	Y	N	H
10-GB-S-48	RHR B RHR Room 124	"	N	N	H
10-GB-S-49	RHR B RHR Room 124	"	N	N	H
10-GB-S-50	RHR B RHR Room 98	"	N	N	H
10-GB-S-51	RHR C RHR Room 98	"	N	N	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
10-GB-S-52	RHR	C RHR Room	124	See 4.11.D.4.d.	N	N	H
10-GB-S-53	RHR	C RHR Room	124	"	N	N	H
10-GB-S-54	RHR	Torus Room	130	"	Y	N	H
10-GB-S-55	RHR	Torus Room	130	"	Y	N	H
10-GB-S-58	RHR	B RHR Room	98	"	N	N	H
10-DCN-S-73	RHR	Drywell	180	"	Y	Y	H
10-DCN-S-74	RHR	Drywell	180	"	Y	Y	H
10-GB-S-77	RHR	A RHR Room	102	"	N	N	M
10-GB-S-76	RHR	A RHR Room	102	"	N	N	M
10-GB-S-75	RHR	A RHR Room	93	"	N	N	M
10-GB-S-80	RHR	D RHR Room	102	"	N	N	M
10-GB-S-79	RHR	D RHR Room	102	"	N	N	M
10-GB-S-78	RHR	D RHR Room	93	"	N	N	M
10-GB-S-51	RHR	B RHR Room	120.5	"	N	N	M
10-GB-S-92	RHR	C RHR Room	120.5	"	N	N	M

TAB. 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION	HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
		See 4.11.D.4.d.			
12-DCN-S-2	RWCU Iso. Valve Rm 173.5	*	Y	N	H
12-DCN-S-5	RWCU Drywell 165	*	Y	Y	H
12-DCN-S-7	RWCU Drywell 165	*	Y	Y	H
12-DCN-S-8A	RWCU Drywell 165	*	N	Y	M
14-DCN-S-23	Core Spray Drywell 168	*	Y	Y	H
14-DCN-S-24	Core Spray Drywell 168	*	Y	Y	H
14-DCN-S-26	Core Spray Drywell 168	*	Y	Y	H
14-DCN-S-27	Core Spray Drywell 168	*	Y	Y	H
13-HB-S-1	RCIC RCIC Room 107	*	Y	N	H
13-DDN-S-13	RCIC RCIC ROOM 96	*	N	N	H
13-HB-S-14	RCIC RCIC Room 102	*	Y	N	H
13-DBN-S-15	RCIC RCIC Room 107	*	Y	N	H
13-DBN-S-16	RCIC Torus Room 140	*	Y	N	H
23-DBN-S-1	HPCI HPCI Room 112	*	Y	Y	H
23-DBN-S-2	HPCI HPCI Room 112	*	Y	N	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
23-DBN-S-3	HPCI	HPCI Room	97	"	N	N	H
23-DBN-S-4	HPCI	HPCI Room	97	"	N	N	H
23-DDN-S-9	HPCI	HPCI Room	105	"	Y	N	H
23-DB-S-16	HPCI	HPCI Room	103	"	N	N	H
23-DB-S-19	HPCI	HPCI Room	103	"	Y	N	H
23-DBN-S-22	HPCI	Drywell	155	"	Y	Y	H
23-DBN-S-23	HPCI	Drywell	155	"	Y	Y	H
23-DDN-S-25	HPCI	HPCI Room	105	"	Y	N	H
23-DBN-S-27	HPCI	HPCI Room	112	"	Y	N	H
23DBN-S-28	HPCI	Torus Room	117		Y	N	H
23-DBN-S-29	HPCI	Torus Room	117	"	Y	N	H
23-DDN-S-35	HPCI	Torus Room	120	"	N	N	M
23-DB-S-30	HPCI	HPCI Room	93	"	N	N	H
23-DB-S-36	HPCI	HPCI Room	103	"	N	N	H
23-DB-S-37	HPCI	HPCI Room	103	"	N	N	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
23-HB-S-38	HPCI	Torus Room	126	"	Y	N	H
27-HC-S-55	HPCI	Torus Room	126	"	N	N	M
1-GG-S-101-A	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-101-B	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-102-A	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-102-B	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-103-A	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-103-B	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-104-A	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-104-B	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-105-A	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-105-B	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-106-A	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-106-B	MSRV	Drywell	135	"	Y	Y	M
1-GG-S-106-A	MSRV	Drywell	145	"	Y	Y	M

TABL. 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM AND ELEVATION		HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
1-GG-S-108-B	MSRV	Drywell	145	*	Y	Y	M
1-GG-S-109-A	MSRV	Drywell	145	*	Y	Y	M
1-GG-S-109-B	MSRV	Drywell	145	*	Y	Y	M
1-GG-S-110-A	MSRV	Drywell	145	*	Y	Y	M
1-GG-S-110-B	MSRV	Drywell	145	*	Y	Y	M
1-GG-S-111-A	MSRV	Drywell	145	*	Y	Y	M
1-GG-S-111-B	MSRV	Drywell	145	*	Y	Y	M
1-GG-S-112-A	MSRV	Drywell	145	*	Y	Y	M
1-GG-S-112-B	MSRV	Drywell	145	*	Y	Y	M
1-GG-S201	MSRV	Drywell	160	*	Y	Y	M
1-GG-S202	MSRV	Drywell	160	*	Y	Y	M
1-GG-S203-A	MSRV	Drywell	160	*	Y	Y	M
1-GG-S203-B	MSRV	Drywell	160	*	Y	Y	M
1-GG-S204-A	MSRV	Drywell	130	*	Y	Y	M
1-GG-S204-B	MSRV	Drywell	130	*	Y	Y	M
1-GG-S205-A	MSRV	Drywell	160	*	Y	Y	M
1-GG-S205-B	MSRV	Drywell	160	*	Y	Y	M
1-GG-S206-A	MSRV	Drywell	160	*	Y	Y	M

TABL 3.11.D.1
Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM AND	ELEVATION	HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
1-GG-S206-B	MSRV	Drywell	160	*	Y	Y	M
1-GG-S207-A	MSRV	Drywell	125	*	Y	Y	M
1-GG-S207-B	MSRV	Drywell	125	*	Y	Y	M
1-GG-S208-A	MSRV	Drywell	125	*	Y	Y	M
1-GG-S208-B	MSRV	Drywell	125	*	Y	Y	M
1-GG-S209-A	MSRV	Drywell	125	*	Y	Y	M
1-GG-S209-B	MSRV	Drywell	125	*	Y	Y	M

Notes for Table 3.11.D.1

1) Yes (Y) or No (N)
2) Hydraulic (H) or Mechanical (M)

3.11 BASES

Alternate Heat Sink

The alternate heat sink is provided as an alternate source of cooling water to the plants in the unlikely event of loss of the normal heat sink (Conowingo Pond) or the maximum credible flood. For the condition of loss of the normal heat sink, the contained volume of water (approximately 3.7 million gallons, which corresponds to a gauge reading of 17') provides a minimum of seven days cooling water to both plants for decay heat removal. The operability requirements for the alternate heat sink are specified in Specification 3.9.

C. Emergency Shutdown Control Panels

The Emergency Shutdown Control Panels are provided to assure the capability of taking the plants to the hot shutdown condition external to the control room for the unlikely condition that the control room becomes uninhabitable.

D. Shock Suppressors (Snubbers) on Safety Related Systems

Snubbers are designed to prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient while allowing normal thermal motion during startup and shutdown. The consequence of an inoperable snubber is an increase in the probability of structural damage to piping as a result of seismic or other event initiating dynamic loads. It is therefore required that all snubbers necessary to protect the primary coolant system or any other safety system or components be operable during reactor operation.

Because the snubber protection is required only during low probability events a period of 72 hours is allowed for repairs or replacements. A determined effort will be made to repair the snubber as soon as possible. This allowable repair period is consistent with the allowable repair items of other safety related components such as RHR pumps, HPCI subsystems, ADS valves and diesel generators.

An engineering analysis must be performed on supported components when a snubber is determined to be inoperable. The purpose of this analysis is to assure that the supported components have not been damaged as a result of the snubber inoperability.

4.11. BASES

B. Alternate Heat Sink Facility

No surveillance requirement other than a monthly level check is expressed for the alternate heat sink since the associated equipment surveillance testing is conducted as required by Specification 3.9.

C. Emergency Shutdown-Control Panels

Once per week verification of the panels being properly secured is considered adequate. The associated equipment is proven operable during surveillance testing of that equipment. An operability verification by electrical test at each refueling outage is adequate to assure that the panels are available and can perform their design function.

D. Shock Suppressors (Snubbers) on Safety Related Systems

All safety related snubbers are visually inspected to verify, 1) proper orientation, 2) freedom of movement where possible to induce motion manually without disconnecting the snubber, 3) proper attachment to structures and equipment, and 4) proper hydraulic fluid level for hydraulic snubbers. Snubbers are categorized into two groups, "accessible" or "inaccessible", based on their accessibility for inspection during reactor operation and drywell inertment. The required inspection interval varies inversely with the observed snubber failures. The number of inoperable snubbers found during a required inspection determines the time interval for the next required inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections will only be used to shorten the required interval and not to lengthen it.

When the cause of the rejection of a snubber is clearly established and remedied for that snubber and for any other snubbers that may be generically susceptible, and verified by inservice functional testing, that snubber may be exempted from being counted as inoperable. Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection or are similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration. When a snubber is found inoperable an engineering evaluation is performed to determine a) snubber mode of failure and, b) if there is any adverse effect or degradation on the supported piping or equipment due to the failure.

To further increase the assurance of snubber reliability, functional tests will be performed once each operating cycle.

Ten percent of each type (hydraulic or mechanical) of snubber on each unit shall constitute an adequate sample.

High radiation areas (as defined in CFR 10 Part 20.202) means any area, accessible to personnel, in which there exists radiation at such levels that a major portion of the body could receive, in any one hour, a dose in excess of 100 millirem. Snubbers considered especially difficult to remove (as indicated in Table 3.11.D.1) are those which because of size, weight, or geometry of installation require the use of unusual rigging equipment or arrangements for their removal, or require more than three hours of effort in their removal.

The service life of a snubber is monitored to assure that consideration is taken for the age of the expendable components. The service life is based upon manufacturer's recommendation, service conditions, maintenance history, operating experience and test and inspection results. When the review of service life records reveals that a snubber is nearing the end of its design service life, efforts are made to include that snubber in the next functional test cycle or the service life is reevaluated. The purpose of the reevaluation is to extend the service life based upon experience and information gained during operations. The results of functional testing and inspection may be used to alter the service lives of all snubbers of similar design operating under similar conditions.

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

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

DOCKET NO. 50-278

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 103
License No. DPR-56

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Philadelphia Electric Company, et al. (the licensee) dated March 24, 1981, as supplemented by letters dated August 6, 1981, December 13, 1982, June 22, 1983, September 14, 1983, and January 26, 1984, 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-56 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 103 , are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Rivenbark, Acting Chief
Operating Reactors Branch No. 4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 2, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 103

FACILITY OPERATING LICENSE NO. DPR-56

DOCKET NO. 50-278

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain a vertical line indicating the area of change.

Remove	Insert
234a	234a
234b	234b
234c	234c
234d	234d
234e	234e
234f	234f
234g	234g
234h	234h
234i	234i
234j	234j
234k	234k
234l	234l
234m	234m
234n	234n
	234o
	234p
	234q
	234r
	234s
235a	235a
236a	236a
236b	236b

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.11.D. Shock Suppressors (Snubbers) on Safety Related Systems	4.11.D. Shock Suppressors (Snubbers) on Safety Related Systems
3.11.D.1 During all modes of operation all snubbers listed in Table 3.11.D.1 shall be operable except as noted in 3.11.D.2 and 3.11.D.3 below.	4.11.D.1 Snubbers listed in Table 3.11.D.1 shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.6.G.
3.11.D.2 During operation in the cold shutdown or refueling modes, snubbers located on system required to be operable shall be operable except as noted in 3.11.D.3.	4.11.D.2 Snubbers listed in Table 3.11.D.1 shall be visually inspected according to the following schedule.
3.11.D.3 With one or more snubbers inoperable, within 72 hours, replace or restore the inoperable snubber to the operable status and perform an engineering evaluation per specification 4.11.D.6. If these requirements cannot be met, declare the supported system inoperable and follow the applicable Limiting Condition for Operation for that System.	

No. of Snubbers Found Inoperable During Inspection Period	Next Visual Inspection Period
0	18 mo. ± 25%
1	12 mo. ± 25%
2	6 mo. ± 25%
3,4	4 mo. ± 25%
5,6,7	2 mo. ± 25%
8 or more	1 mo. ± 25%

The required inspection interval shall not be lengthened more than one step at a time. The provisions for extending surveillance frequency included in Section 1.0 Definitions do not apply. Snubbers may be categorized in two groups, "accessible" or "inaccessible", based on their accessibility for inspection during reactor operation. These two groups may be inspected independently according to the above schedule.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.11.D.4 Snubbers may be added to safety related systems without prior License Amendment to Table 3.11.D.1 provided that a revision on Table 3.11.D.1 is included with the next License Amendment request.	4.11.D.3 The visual inspection shall verify that 1) there are no indications of damage or impaired operability, 2) attachments are secure, and 3) there is freedom of movement if this can be verified without disconnecting the snubber. Snubbers which appear to be inoperable may be made operable for the purpose of establishing the next visual inspection interval, providing that 1) the cause of the rejection is clearly established and remedied for that particular snubber and for other generically susceptable snubbers; and 2) the affected snubber is functionally tested in the as found condition and determined operable per Specification 4.11.D.7 or 4.11.D.8, as applicable. When the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined to be inoperable for the purpose of establishing the next visual inspection interval. 4.11.D.4 Functional Test a) Once each operating cycle, during shutdown, a representative sample of 10% of each type of (mechanical or hydraulic) snubber shall be functionally tested either in place or in a bench test. For every unit found to be inoperable an additional 10% of that type of snubber shall be functionally tested until no more failures are found or all snubbers of that type have been tested. The functional test requirement for mechanical snubbers will not take effect

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
	until the first refueling outage commencing one year after approval, by the NRC, of this Technical Specification amendment. b) The representative sample selected for functional testing shall include various configurations, operating environments, sizes, and capacities of snubbers. At least 25% of the sample shall include snubbers from the following categories: 1. The first snubber away from each reactor nozzle. 2. Snubbers within five feet of heavy equipment (valves, pumps, turbines, motors) 3. Snubbers connected to safety/relief valve discharge piping within 10 feet of the valve. c) If any snubber selected for functional test either fails to lock up or fails to move, the cause shall be evaluated and if the failure is caused by manufacturing or design deficiency, all snubbers of the same design subject to the same defect shall be functionally tested. This testing requirement is independent of the requirements above for snubbers not meeting the functional test acceptance criteria. d) Snubbers which are especially difficult to remove (as identified in Table 3.11.D.1) or are in high radiation areas during shutdown (dose greater than 100 mrem/hour) shall be included in the representative sample except for those snubbers specifically exempted by the NRC.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
	4.11.D.5 In addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next testing cycle. If such a failed snubber was replaced, both the replacement snubber and the repaired snubber (if it had been repaired and installed in another position) shall be retested. The test results of these snubbers may not be included for the resampling of 4.11.D.4.a. 4.11.D.6 For snubbers found inoperable, an engineering evaluation shall be performed to determine a) mode of failure, and b) if there is any adverse effect on the supported piping or components due to the snubber inoperability. 4.11.D.7 Hydraulic Snubbers Functional Test Criteria: Functional test shall verify that: a) Restraining action is achieved within specified range of velocity or acceleration in both compression and tension. b) Snubber bleed rate is within the specified range in both tension and compression. Snubbers specifically required not to displace under continuous load shall have this capability verified.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
	4.11.D.8 Mechanical Snubber Functional Test Criteria: Functional tests shall verify that: a) The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force. Drag force shall not have increased more than 50% since the last functional test. b) Restraining Action is achieved within the specified range of velocity or acceleration in both tension and compression. c) Snubber release rate, where required, is within the specified range in compression or tension. Snubbers specifically required not to displace under continuous load shall have this capability verified. 4.11.D.9 Service Life Monitoring A record of the service life of each snubber listed in Table 3.11.D.1, the date of commencement of service life, (January 1, 1978, unless otherwise specified) and the installation and maintenance records upon which the service life is based shall be maintained. Once each operating cycle, these records shall be reviewed to verify that no snubber service life shall be exceeded prior to the next review. If the service life will be exceeded then either recondition or replace the snubbers or re-evaluate the service life.

TABLE 3.11.D.1

Safety Related Snock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d			
1-GG-S-1	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-2	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-3	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-4	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-5	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-6	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-7	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-8	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-9	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-10	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-11	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-12	MSRV	Drywell	135	"	N	Y	H
1-GG-S-13	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-14	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-15	MSRV	Drywell	135	"	Y	Y	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d			
1-GG-S-16	MSRV	Drywell	135	"	N	Y	H
1-GG-S-17	MSRV	Drywell	135	"	N	Y	H
1-GG-S-18	MSRV	Drywell	135	"	N	Y	H
1-GG-S-19	MSRV	Drywell	135	"	N	Y	H
1-GG-S-20	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-21	MSRV	Drywell	135	"	Y	Y	H
1-GG-S-22	MSRV	Drywell	135	"	N	Y	H
1-GG-S-23	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-24	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-25	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-26	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-27	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-28	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-29	MSRV	Drywell	155	"	Y	Y	H
1-GG-S-30	MSRV	Drywell	155	"	Y	Y	H

TABL. 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM AND ELEVATION		HIGH (1) RADIATION AREA DURING SHUTDOWN See 4.11.D.4.d.	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
1-GG-S-31	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-32	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-33	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-34	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-35	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-36	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-49	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-50	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-51	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-52	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-53	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-54	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-55	MSRV	Drywell	155	-	Y	Y	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM AND	ELEVATION	HIGH (1) RADIATION AREA DURING SHUTDOWN See 4.11.D.4.d.	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
1-GG-S-57	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-59	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-60	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-61	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-62	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-63	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-64	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-65	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-66	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-67	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-68	MSRV	Drywell	155	-	Y	Y	H
1-GG-S-69	MSRV	Drywell	155	-	Y	Y	H
SS-A-1	Main Steam	Drywell	150	-	Y	Y	H
SS-A-3	Main Steam	Drywell	150	-	Y	Y	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d			
SS-B-1	Main Steam	Drywell	150	"	Y	Y	H
SS-B-3	Main Steam	Drywell	150	"	Y	Y	H
SS-B-4	Main Steam	Drywell	150	"	Y	Y	H
SS-B-5	Main Steam	Drywell	150	"	Y	Y	H
SS-B-6	Main Steam	Drywell	150	"	Y	Y	H
SS-C-1	Main Steam	Drywell	150	"	Y	Y	H
SS-C-3	Main Steam	Drywell	150	"	Y	Y	H
SS-C-4	Main Steam	Drywell	150	"	Y	Y	H
SS-C-5	Main Steam	Drywell	150	"	Y	Y	H
SS-C-6	Main Steam	Drywell	150	"	Y	Y	H
SS-D-1	Main Steam	Drywell	150	"	Y	Y	H
SS-D-3	Main Steam	Drywell	150	"	Y	Y	H
SS-1-A	RECIRC	Drywell	120	"	Y	Y	H
SS-1-B	RECIRC	Drywell	120	"	Y	Y	H
SS-2-A	RECIRC	Drywell	130	"	Y	Y	H

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d			
SS-2-B	RECIRC	Drywell	130	"	Y	Y	H
SS-3-A	RECIRC	Drywell	140	"	Y	Y	H
SS-3-B	RECIRC	Drywell	140	"	Y	Y	H
SS-3-C	RECIRC	Drywell	140	"	Y	Y	H
SS-3-D	RECIRC	Drywell	140	"	Y	Y	H
SS-5-A	RECIRC	Drywell	150	"	Y	Y	H
SS-5-B	RECIRC	Drywell	150	"	Y	Y	H
SS-5-C	RECIRC	Drywell	150	"	Y	Y	H
SS-5-D	RECIRC	Drywell	150	"	Y	Y	H
SS-6-A	RECIRC	Drywell	130	"	Y	Y	H
SS-6-B	RECIRC	Drywell	130	"	Y	Y	H
H-3LS-142-1	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-2	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M

TABLE 3.11.D.1

Safety Related Snock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d			
H-3LS-142-3	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-4	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-5	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-6	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-7	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
H-3LS-142-8	Control Rod Drive Supply Bundles	Drywell	145	"	N	Y	M
6-DDNL-S-5	Feedwater	Drywell	168	"	Y	Y	H
6-DDNL-S-6	Feedwater	Drywell	168	"	Y	Y	H
6-DDNL-S-7	Feedwater	Drywell	168	"	Y	Y	H

TABLE 3.11.D.1
Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION	HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
		See 4.11.D.4.d.			
6-DDNL-S-8	Feedwater Drywell 168	"	Y	Y	H
6-DDNL-S-9	Feedwater Drywell 168	"	Y	Y	H
6-DDNL-S-10	Feedwater Drywell 168	"	Y	Y	H
6-DDNL-S-11	Feedwater Drywell 155	"	Y	Y	H
6-DDNL-S-12	Feedwater Drywell 155	"	Y	Y	H
6-DDNL-S-13	Feedwater Drywell 155	"	Y	Y	H
6-DDNL-S-14	Feedwater Drywell 155	"	Y	Y	H
9-HB-H51	Torus Vac. Bkr. 116	"	N	N	M
9-HB-H53	Torus Vac. Bkr. 116	"	N	N	M
10-HB-S-1	RHR Torus Room 95	"	N	N	M
10-HB-S-7	RHR B RHR Room 124	"	N	N	H
10-HB-S-8	RHR Torus Room 95	"	N	N	M
10-GB-S-12	RHR C RHR Room 98	"	Y	N	H
10-GB-S-43-1	RHR Torus Room 130	"	Y	N	H
10-GB-S-43-2	RHR Torus Room 130	"	Y	N	H
10-GB-S-44	RHR Torus Room 128	"	Y	N	M

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d			
10-GB-S-48	RHR	E RHR Room	124	"	N	N	H
10-GB-S-49	RHR	E RHR Room	124	"	N	N	H
10-GB-S-50	RHR	E RHR Room	98	"	N	N	M
10-GB-S-51	RHR	C RHR Room	98	"	N	N	M
10-GB-S-52	RHR	C RHR Room	124	"	N	N	H
10-GB-S-53	RHR	C RHR Room	124	"	N	N	H
10-GB-S-54	RHR	Torus Room	130	"	Y	N	H
10-GB-S-55	RHR	Torus Room	130	"	Y	N	H
10-GB-S-58	RHR	B RHR Room	93	"	N	N	H
10-GB-S-62	RHR	A RHR Room	102	"	N	N	M
10-GB-S-63	RHR	A RHR Room	102	"	N	N	M
10-GB-S-64	RHR	A RHR Room	93	"	N	N	M
10-GB-S-65	RHR	D RHR Room	102	"	N	N	M
10-GB-S-66	RHR	D RHR Room	102	"	N	N	M
10-GB-S-67	RHR	D RHR Room	93	"	N	N	M

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION			HIGH (1) RADIATION AREA DURING SHUTDOWN See 4.11.D.4.d.	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
10-DCN-S-73	RHR	Drywell	180	-	N	N	H
10-DCN-S-74	RHR	Drywell	180	-	Y	Y	H
10-GB-S-81	RHR	B RHR Room	120	-	N	N	H
12-DCN-S-2	RWCU	Iso. Valve Rm	173.5	-	Y	Y	H
12-DCN-S-5	RWCU	Drywell	165	-	Y	Y	H
12-DCN-S-7	RWCU	Drywell	165	-	Y	Y	H
12-DCN-S-9	RWCU	Drywell	165	-	Y	Y	H
14-HCR-S-4	Core Spray	B/D Core Spray Room	127.5	-	N	N	H
14-DCN-S-23	Core Spray	Drywell	168	-	Y	Y	H
14-DCN-S-24	Core Spray	Drywell	168	-	Y	Y	H
14-DCN-S-26	Core Spray	Drywell	168	-	Y	Y	H
14-DCN-S-27	Core Spray	Drywell	168	-	Y	Y	H

TABLE 3.11.D.1
Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	SYSTEM LOCATION AND ELEVATION		HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
			See 4.11.D.4.d.			
13-HB-S-22	RCIC	RCIC Room 103	"	Y	Y	H
23-DBN-S-1	HPCI	Torus Room 121	"	Y	Y	H
23-HB-S-1A	HPCI	HPCI Room 103	"	Y	Y	H
23-HB-S-2A	HPCI	HPCI Room 103	"	N	Y	H
23-HB-S-3A	HPCI	HPCI Room 99	"	Y	Y	M
23-DBN-S-6-1	HPCI	Torus Room 121	"	Y	N	H
23-DBN-S-6-2	HPCI	Torus Room 121	"	Y	N	H
23-DBN-S-22	HPCI	Drywell 155	"	Y	Y	H
23-DBN-S-23	HPCI	Drywell 155	"	Y	Y	H
23-DBN-S-29	HPCI	HPCI Room 117	"	N	N	H
23-DBN-S-33	HPCI	HPCI Room 93	"	N	N	H
23-DBN-S-47	HPCI	Torus Room 121	"	N	N	M
27-HCR-S-187	HPCI	R/D Core Spray Room 127.5	"	N	N	M
27-HCR-S-188	HPCI	Torus Room 122.8	"	N	N	M

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM AND ELEVATION		HIGH (1) RADIATION AREA DURING SHUTDOWN See 4.11.D.4.d.	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
1-GG-S-101-A	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-101-B	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-102-A	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-102-B	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-103-A	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-103-B	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-104-A	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-104-B	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-105-A	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-105-B	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-106-A	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-106-B	MSRV	Drywell	135	-	Y	Y	M
1-GG-S-108-A	MSRV	Drywell	145	-	Y	Y	M
1-GG-S-108-B	MSRV	Drywell	145	-	Y	Y	M

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM AND ELEVATION		HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
1-GG-S-109-A	MSRV	Drywell	145	"	Y	Y	M
1-GG-S-109-B	MSRV	Drywell	145	"	Y	Y	M
1-GG-S-110-A	MSRV	Drywell	145	"	Y	Y	M
1-GG-S-110-B	MSRV	Drywell	145	"	Y	Y	M
1-GG-S-111-A	MSRV	Drywell	145	"	Y	Y	M
1-GG-S-111-B	MSRV	Drywell	145	"	Y	Y	M
1-GG-S-112-A	MSRV	Drywell	145	"	Y	Y	M
1-GG-S-112-B	MSRV	Drywell	145	"	Y	Y	M
1-GG-S201	MSRV	Drywell	160	"	Y	Y	M
1-GG-S202	MSRV	Drywell	160	"	Y	Y	M
1-GG-S203-A	MSRV	Drywell	160	"	Y	Y	M
1-GG-S203-B	MSRV	Drywell	160	"	Y	Y	M
1-GG-S204-A	MSRV	Drywell	130	"	Y	Y	M
1-GG-S204-B	MSRV	Drywell	130	"	Y	Y	M
1-GG-S205-A	MSRV	Drywell	160	"	Y	Y	M

TABLE 3.11.D.1

Safety Related Shock Suppressors (Snubbers)

SNUBBER NUMBER	LOCATION	SYSTEM AND ELEVATION		HIGH (1) RADIATION AREA DURING SHUTDOWN	ESPECIALLY (1) DIFFICULT TO REMOVE	INACCESSIBLE (1) DURING NORMAL OPERATION	TYPE (2)
				See 4.11.D.4.d.			
1-GG-S205-B	MSRV	Drywell	160	"	Y	Y	M
1-GG-S206-A	MSRV	Drywell	160	"	Y	Y	M
1-GG-S206-B	MSRV	Drywell	160	"	Y	Y	M
1-GG-S207-A	MSRV	Drywell	125	"	Y	Y	M
1-GG-S207-B	MSRV	Drywell	125	"	Y	Y	M
1-GG-S208-A	MSRV	Drywell	125	"	Y	Y	M
1-GG-S208-B	MSRV	Drywell	125	"	Y	Y	M
1-GG-S209-A	MSRV	Drywell	125	"	Y	Y	M
1-GG-S209-B	MSRV	Drywell	125	"	Y	Y	M
14-GB-S-33	Core Spray Torus Room		128	"	Y	N	M
14-GB-S-34	Core Spray Torus Room		128	"	Y	N	M
14-MO-H-57	Core Spray Torus Room		126	"	Y	N	M
14-MO-S-42A	Core Spray Torus Room		130	"	Y	N	M
14-MO-S-42B	Core Spray Torus Room		130	"	Y		M

Notes for Table 3.11.D.1

1) Yes (Y) or No (N)

2) Hydraulic (H) or Mechanical (M)

3.11 BASES

Alternate Heat Sink

The alternate heat sink is provided as an alternate source of cooling water to the plants in the unlikely event of loss of the normal heat sink (Conowingo Pond) or the maximum credible flood. For the condition of loss of the normal heat sink, the contained volume of water (approximately 3.7 million gallons, which corresponds to a gauge reading of 17') provides a minimum of seven days cooling water to both plants for decay heat removal. The operability requirements for the alternate heat sink are specified in Specification 3.9.

C. Emergency Shutdown Control Panels

The Emergency Shutdown Control Panels are provided to assure the capability of taking the plants to the hot shutdown condition external to the control room for the unlikely condition that the control room becomes uninhabitable.

D. Shock Suppressors (Snubbers) on Safety Related Systems

Snubbers are designed to prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient while allowing normal thermal motion during startup and shutdown. The consequence of an inoperable snubber is an increase in the probability of structural damage to piping as a result of seismic or other event initiating dynamic loads. It is therefore required that all snubbers necessary to protect the primary coolant system or any other safety system or components be operable during reactor operation.

Because the snubber protection is required only during low probability events a period of 72 hours is allowed for repairs or replacements. A determined effort will be made to repair the snubber as soon as possible. This allowable repair period is consistent with the allowable repair items of other safety related components such as RHR pumps, HPCI subsystems, ADS valves and diesel generators.

An engineering analysis must be performed on supported components when a snubber is determined to be inoperable. The purpose of this analysis is to assure that the supported components have not been damaged as a result of the snubber inoperability.

4.11. BASES

B. Alternate Heat Sink Facility

No surveillance requirement other than a monthly level check is expressed for the alternate heat sink since the associated equipment surveillance testing is conducted as required by Specification 3.9.

C. Emergency Shutdown-Control Panels

Once per week verification of the panels being properly secured is considered adequate. The associated equipment is proven operable during surveillance testing of that equipment. An operability verification by electrical test at each refueling outage is adequate to assure that the panels are available and can perform their design function.

D. Shock Suppressors (Snubbers) on Safety Related Systems

All safety related snubbers are visually inspected to verify, 1) proper orientation, 2) freedom of movement where possible to induce motion manually without disconnecting the snubber, 3) proper attachment to structures and equipment, and 4) proper hydraulic fluid level for hydraulic snubbers. Snubbers are categorized into two groups, "accessible" or "inaccessible", based on their accessibility for inspection during reactor operation and drywell inertment. The required inspection interval varies inversely with the observed snubber failures. The number of inoperable snubbers found during a required inspection determines the time interval for the next required inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections will only be used to shorten the required interval and not to lengthen it.

When the cause of the rejection of a snubber is clearly established and remedied for that snubber and for any other snubbers that may be generically susceptible, and verified by inservice functional testing, that snubber may be exempted from being counted as inoperable. Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection or are similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration. When a snubber is found inoperable an engineering evaluation is performed to determine a) snubber mode of failure and, b) if there is any adverse effect or degradation on the supported piping or equipment due to the failure.

To further increase the assurance of snubber reliability, functional tests will be performed once each operating cycle.

Ten percent of each type (hydraulic or mechanical) of snubber on each unit shall constitute an adequate sample.

High radiation areas (as defined in CFR 10 Part 20.202) means any area, accessible to personnel, in which there exists radiation at such levels that a major portion of the body could receive, in any one hour, a dose in excess of 100 millirem. Snubbers considered especially difficult to remove (as indicated in Table 3.11.D.1) are those which because of size, weight, or geometry of installation require the use of unusual rigging equipment or arrangements for their removal, or require more than three hours of effort in their removal.

The service life of a snubber is monitored to assure that consideration is taken for the age of the expendable components. The service life is based upon manufacturer's recommendation, service conditions, maintenance history, operating experience and test and inspection results. When the review of service life records reveals that a snubber is nearing the end of its design service life, efforts are made to include that snubber in the next functional test cycle or the service life is reevaluated. The purpose of the reevaluation is to extend the service life based upon experience and information gained during operations. The results of functional testing and inspection may be used to alter the service lives of all snubbers of similar design operating under similar conditions.