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

OMAHA PUBLIC POWER DISTRICT

DOCKET NO. 50-285

FORT CALHOUN STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 59
License No. DPR-40

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

   A. The application for amendment by the Omaha Public Power District (the licensee) dated March 25, 1981 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, Facility Operating License No. DPR-40 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-40 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 59, 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

Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 20, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 59

FACILITY OPERATING LICENSE NO. DPR-40

DOCKET NO. 50-285

Revise Appendix "A" Technical Specifications as indicated below. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

Remove Pages	Insert Pages
2-73 through 2-78	2-73 through 2-78
2-81 through 2-84	2-81 through 2-84
2-86 through 2-88	2-86 through 2-88
-	2-88a
3-77	3-77
3-78	3-78
3-79	3-79
-	3-79a
5-19	5-19

2.0 LIMITING CONDITIONS FOR OPERATION

2.18 Shock Suppressors (Snubbers)

Applicability

This specification applies to safety-related shock suppressors (snubbers). Operating Modes 1, 2 and 3 (Operating Modes 4 and 5 for snubbers located on systems required operable in those Operating Modes).

Objective

The objective is to specify modes of reactor operation for given conditions of safety-related snubbers.

Specifications

(1) All snubbers listed in Table 2-6(a) and (b) shall be operable except as noted in 2.18(2) through 2.18(4) below.

(2) With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to operable status and perform an engineering evaluation per Specification 3.14(3) on the supported component or declare the supported system inoperable and follow the appropriate actions specified in the Technical Specifications for that system.

(3) A snubber may be removed for surveillance in accordance with Section 3.14(3) of these Technical Specifications, provided the following conditions are met:

(a) A given snubber station shall not be without an operable snubber for more than two hours during surveillance of attendant snubber. A snubber may be replaced by an operable snubber during surveillance and repair.

(b) No other snubber station, containing snubbers listed in Table 2-6(a) and (b), is known to be inoperable.

(c) Only one snubber station, containing snubbers listed in Table 2-6(a)and (b), shall be removed for testing at a time to ensure that no two snubber stations are without an operable snubber during the same time interval.

(4) Snubbers may be added, changed, or deleted from Table 2-6(a) and (b) without prior licensing amendments provided an accepted engineering analysis justifies each change. Deletions will be allowed only after an independent review of the engineering justification is performed and the deletions are approved by SARC. Any revisions to Table 2-6(a) and (b) will be included in subsequent licensing amendment requests.

2.0 LIMITING CONDITIONS FOR OPERATION
2.18 Shock Suppressors (Snubbers)

Basis

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 or shutdown. The consequence of an inoperable snubber is an increase in the probability of structural damage to piping as a result of a seismic, or other event, initiating dynamic loads. It is therefore required that all snubbers required to protect the primary coolant system or any other safety system or component be operable during reactor operation.

Because the snubber protection is required only during low probability events, an inoperable period of 72 hours is allowed for repairs or replacements and an inoperable period of two hours is allowed for surveillance.

Table 2-6 (a) and (b) lists the snubbers that are on safety-related systems. The snubbers that are listed as "Inaccessible During Normal Operation" are located inside of the containment building and would require a significant expenditure in man-rems to inspect on a periodic basis. Revisions may be made to Table 2-6 (a) and (b) without prior notice provided that an engineering analysis justifies these changes.

Those snubbers listed as "Difficult to Remove for Functional Testing" are so listed because they are either:

(1) rated at greater than 50,000 lbs. force,
(2) inaccessible due to surrounding structures, or
(3) located such that an excessive amount of time and effort would be required to remove them for testing.

TABLE 2-6 (a)

ACCESSIBILITY OF SAFETY-RELATED SYSTEM HYDRAULIC SNUBBERS

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
ACS-18	996' 8"	X			
ACS-112	1040' 0"		X		X
ACS-113	1040' 0"		X		X
ACS-113A	1040' 0"		X		X
ACS-116	1031' 4"		X		
ACS-117	1031' 4"		X		
ACS-118	1031' 4"		X		
ACS-121	1031' 4"		X		
ACS-123	1031' 4"		X		
ACS-127A	1040' 0"		X		X
ACS-128	1040' 0"		X		X
ACS-299	1056' 4-11/16"		X		
ACS-299A	1056' 6"		X		
ACS-302	1056' 4-11/16"		X		
ACS-304	1056' 4-11/16"		X		
ACS-305	1056' 4-11/16"		X		
ACS-306	1056' 4-11/16"		X		
ACS-307	1056' 4-11/16"		X		
ACS-313	1054' 11"		X		
ACS-385	987' 5¼"	X			
FWS-1 Top	1038' 6"		X		X
FWS-1 Bottom	1038' 6"		X		X
FWS-1A	1033' 6"		X		X
FWS-1B	1033' 5½"		X		X
FWS-1C	1033' 5½"		X		X
FWS-2 Top	1038' 6"		X		X
FWS-2 Bottom	1038' 6"		X		X

TABLE 2-6 (a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
FWS-2A	1038' 6"		X		X
FWS-2B	1038' 5½"		X		X
FWS-2C	1038' 5½"		X		X
FWS-3B-North	1038' 5½"	X			
FWS-3B-South	1033' 6"	X			
FWS-7D-North	1038' 6"	X			
FWS-7D-South	1038' 6"	X			
FWS-28	1002' 6"	X			
FWS-29A	1002' 6"	X			
FWS-30	1002' 6"	X			
FWS-32	1005' 1"		X		
FWS-32A	1005' 1"		X		
FWS-33	1001' 6"		X		
FWS-34	1001' 6"		X		
FWS-35	1005' 5"		X		
FWS-36	1005' 5"		X		
FWS-37	1005' 5"		X		
FWS-38	1010' 0"		X		
FWS-39	1012' 1½"		X		
FWS-64	1043' 0"	X			
FWS-64A	1041' 0"	X			
FWS-64B	1041' 0"	X			
FWS-65	1049' 6"	X			
FWS-66	1049' 6"	X			
FWS-67	1049' 6"	X			
FWS-68	1049' 6"	X			
FWS-68A	1049' 6"	X			
FWS-69	1049' 6"	X			
FWS-71	1037' 6"	X			

TABLE 2-6 (a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
FWS-74	1053' 0"	X			
FWS-75A	1053' 0"	X			
FWS-78	1038' 4"	X			
FWS-79	1049' 6"	X			
FWS-80	1049' 6"	X			
FWS-81	1049' 6"	X			
FWS-83	1033' 4"	X			
FWS-86A	999' 0"	X			
FWS-87	999' 0"	X			
FWS-88	999' 0"	X			
FWS-88A	999' 0"	X			
FWS-89	1002' 6"	X			
FWS-90	1001' 6"	X			
FWS-90A	1005' 6-5/8"	X			
FWS-91	1019' 0"	X			
FWS-92	1019' 0"	X			
FWS-92A	1026' 0"	X			
FWS-93	1032' 0"	X			
FWS-94	1032' 0"	X			
FWS-95	1032' 0"	X			
FWS-96	1032' 0"	X			X
FWS-97	1032' 0"	X			X
FWS-98	1032' 0"	X			X
FWS-100	1039' 0"	X			
FWS-101	1039' 0"	X			
MSS-1	1054' 7"		X		X
MSS-2	1054' 8½"		X		X
MSS-3	1038' 0"	X			
MSS-4-Top	1038' 6"		X		X

TABLE 2-6 (a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
MSS-4 Bottom	1038' 6"		X		X
MS-5	1054' 7"		X		X
MSS-6	1054' 8½"		X		X
MSS-7	1038' 6"		X		X
MSS-8-Top	1038' 6"		X		X
MSS-8-Bottom	1038' 6"		X		X
MSS-8A	1038' 6"		X		X
MSS-8B	1038' 6"		X		X
MSS-8C	1038' 6"		X		X
MSS-8D	1038' 6"		X		X
MSS-9	1040' 7"	X			
MSS-9A	1040' 7"	X			
MSS-9B-North	1033' 6"	X			
MSS-9B-South	1033' 6"	X			
MSS-13	1040' 7"	X			
MSS-13A-East	1040' 0"	X			
MSS-13A-West	1040' 0"	X			
MSS-13B-North	1038' 6"	X			
MSS-13B-South	1038' 6"	X			
RCP-A1	1016' 0"		X		
RCP-A2	1016' 0"		X		
RCP-A3	1016' 0"		X		
RCP-A4	1016' 0"		X		
RCP-B1	1016' 0"		X		
RCP-B2	1016' 0"		X		
RCP-B3	1016' 0"		X		
RCP-B4	1016' 0"		X		

TABLE 2-6(a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
RCS-52	1007' 9"		X		
RWS-79	1046' 0"	X			X
RWS-128	998' 8½"	X			
RWS-130	998' 8½"	X			
RWS-131	998' 8½"	X			
SG-A1	1049' 0"		X		X
SG-A2	1049' 0"		X		X
SG-A3	1049' 0"		X		X
SG-A4	1049' 0"		X		X
SG-B1	1049' 0"		X		X
SG-B2	1049' 0"		X		X
SG-B3	1049' 0"		X		X
SG-B4	1049' 0"		X		X
SIS-1	979' 6"	X			
SIS-1A	979' 6"	X			
SIS-3	979' 6"	X			
SIS-4	979' 6"	X			
SIS-4A	979' 6"	X			
SIS-5	979' 6"	X			
SIS-5A	979' 6"	X			
S-6	979' 6"	X			
SIS-6A	979' 6"	X			
SIS-7	979' 6"	X			
SIS-8	979' 4"	X			
SIS-8B	979' 6"	X			
SIS-8C	979' 6"	X			
SIS-9	979' 6"	X			
SIS-9A	979' 6"	X			
SIS-9B	979' 6"	X			
SIS-10	983' 6"	X			
SIS-11	983' 6"	X			
SIS-16	981' 6"	X			
SIS-16A	981' 6"	X			
SIS-17	979' 6"	X			

TABLE 2-6(a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
SIS-17A	979' 6"	X			
SIS-18	979' 6"	X			
SIS-19	979' 6"	X			
SIS-20	979' 6"	X			
SIS-21	979' 6"	X			
SIS-21A	981' 6"	X			
SIS-21B	981' 6"	X			
SIS-21C	981' 6"	X			
SIS-22	981' 6"	X			
SIS-24	983' 6"	X			
SIS-24A	983' 6"	X			
SIS-26	979' 6"	X			
SIS-27	981' 6"	X			
SIS-27A	981' 6"	X			
SIS-27B	981' 6"	X			
SIS-28	980' 0"	X			
SIS-28A	980' 0"	X			
SIS-29	980' 0"	X			
SIS-30	979' 6"	X			
SIS-30A	979' 6"	X			
S-31	981' 6"	X			
SIS-31A	981' 6"	X			
SIS-32	980' 0"	X			
SIS-32A	980' 0"	X			
SIS-32B	980' 0"	X			
SIS-33-Top	981' 6"	X			
SIS-33-Bottom	981' 6"	X			X
SIS-34	980' 0"	X			
SIS-35-Top	980' 0"	X			
SIS-35-Bottom	980' 0"	X			
SIS-36-Top	974' 6"	X			

TABLE 2-6(a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
SIS-36- Bottom	974' 6"	X			
SIS-37- Top	981' 6"	X			
SIS-37- Bottom	981' 6"	X			
SIS-38	981' 6"	X			X
SIS-38B	981' 6"	X			X
SIS-38C	981' 6"	X			X
SIS-39- Top	973' 0"	X			
SIS-39- Bottom	973' 0"	X			
SIS-39A	973' 0"	X			
SIS-40- Top	981' 6"	X			
SIS-40- Bottom	981' 6"	X			
SIS-41A	979' 6"	X			
SIS-42	979' 6"	X			
S-42A	979' 6"	X			
SIS-43	979' 6"	X			
SIS-43A	979' 6"	X			
SIS-44	979' 6"	X			
SIS-44A	979' 6"	X			
SIS-44B	979' 6"	X			
SIS-44C	979' 6"	X			
SIS-45	974' 6"	X			
SIS-45A	979' 6"	X			
SIS-46	979' 6"	X			
SIS-47	979' 6"	X			
SIS-48	979' 6"	X			
SIS-49	979' 6"	X			
SIS-50	979'	X			

TABLE 2-6(a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
SIS-53	997' 6"	X			
SIS-53A	997' 6"	X			
SIS-54	996' 6"	X			
SIS-55	996' 6"	X			
SIS-56	996' 6"	X			
SIS-56A	996' 6"	X			
SIS-57	995' 11-3/8"	X			
SIS-58	995' 11-3/8"	X			
SIS-59	996' 6"	X			
SIS-60	996' 6"	X			
SIS-63	990' 6"	X			
SIS-64	990' 6"	X			
SIS-65	990' 9"	X			
SIS-66	1000' 0"	X			
SIS-67	1000' 0"	X			
SIS-68	1001' 9-3/8"	X			
SIS-69	1003' 6"	X			X
SIS-70	1000' 0"	X			
SIS-71A	1002' 8"	X			
SIS-72	1002' 8"	X			
SIS-73	1002' 8"	X			
SIS-74	1002' 8"	X			
SIS-74A	1002' 8"	X			
SIS-75	1002' 8"	X			
SIS-76	997' 6"	X			
SIS-76A	997' 6"	X			
SIS-77	991' 0"	X			
SIS-77A	991' 0"	X			
SIS-78	991' 0"	X			
SIS-79	1001' 4"	X			
SIS-79A	1001' 4"	X			

TABLE 2-6(a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
SIS-101	991' 0"	X			
SIS-101A	991' 0"	X			
SIS-102	991' 0"	X			
SIS-103	1001' 4"	X			
SIS-104	1001' 4"	X			
SIS-104A	1001' 4"	X			
SIS-104B	1001' 4"	X			
SIS-115	1009' 5-3/4"		X		
SIS-116	1009' 5-3/4"		X		
SIS-117	1009' 5-3/4"		X		
SIS-117A	1009' 5-3/4"		X		
SIS-118	1009' 5-3/4"		X		
SIS-118A	1009' 5-3/4"		X		
SIS-119 Top	1006' 4-1/2"		X		
SIS-119 Bottom	1006' 4-1/2"		X		
SIS-120	1006' 4-1/2"		X		
SIS-121	1007' 10"		X		
SIS-122	1003' 0-1/8"		X		
SIS-122A	1003' 0-1/3"		X		
SIS-123	1003' 0-1/3"		X		
SIS-124	1010' 4"		X		
SIS-127	1010' 4"		X		
SIS-127A	1010' 10-1/2"		X		
SIS-129	1005' 5"		X		
SIS-130	1008' 2"		X		
SIS-132	1008' 2"		X		
SIS-134	1003' 0"		X		
SIS-135	1003' 0"		X		
SIS-140	1008' 10"		X		
SIS-150	1008' 10"		X		
SIS-159A	1004' 3-1/6"		X		
SIS-161	1014' 0"		X		

TABLE 2-6(a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
SIS-162	1014' 6"		X		
SIS-164	1014' 0"		X		
SIS-165	1014' 6"		X		
SIS-165A Top	1014' 6"		X		
SIS-165A Bottom	1014' 6"		X		
SIS-166	1014' 6"		X		
SIS-167	1014' 6"		X		
SIS-168	1014' 6"		X		
SIS-168A Top	1014' 6"		X		
SIS-168A Bottom	1014' 6"		X		
SIS-169	1007' 7"	X			
SIS-169A	1007' 7"	X			
SIS-170	1007' 8"	X			
SIS-170A	1007' 5"	X			
SIS-172	1032' 0"	X			
SIS-173	1036' 8"	X			
SIS-174	1049' 2"		X		
SIS-174A	1049' 6"		X		
SIS-174B	1051' 7-1/4"		X		X
SIS-174C	1052' 6"		X		X
SIS-174D	1063' 7-1/4"		X		X
SIS-174E	1064' 6"		X		X
SIS-175	1057' 0"		X		X
SIS-175A	1056' 5-1/2"		X		
SIS-176	1064' 6"	X			X
SIS-176B	1052' 6"		X		X
SIS-176C	1051' 7-1/4"		X		X
SIS-176D	1064' 6"		X		X
SIS-176E	1063' 7-1/4"		X		X
SIS-176G	1074' 0"		X		X
SIS-176H	1074' 0"		X		X
SIS-178	981' 6"	X			

TABLE 2-6(a)
(Continued)

*Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
SIS-183	1055' 9-1/2"	X			
SIS-184	979' 6"	X			
SIS-185	979' 6"	X			
SIS-187	983' 6"	X			
SIS-188	988' 6"	X			
SIS-202	1009' 0"	X			
SIS-204	995' 0"	X			
SIS-205	979' 6"	X			
SIS-206	983' 6"	X			
SIS-208	1003' 1-1/8"	X			
WDS-107	1004' 0"	X			
WDS-122-Right	991' 6"	X			
WDS-122-Left	991' 6"	X			

NOTE: Modifications to this table due to changes in high radiation areas should be submitted to the NRC as part of the next licensing amendment request.

*Location

ACS	Auxiliary Coolant System
FWS	Feedwater System
MSS	Main Steam System
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RWS	Raw Water System
SG	Steam Generator
SIS	Safety Injection System
WDS	Waste Disposal System

TABLE 2-6(b)

ACCESSIBILITY OF SAFETY-RELATED SYSTEM MECHANICAL SNUBBERS

Snubber No.	Elevation	Accessible During Normal Operation	Inaccessible During Normal Operation	Located In High Radiation Areas During Shutdown	Difficult to Remove for Functional Testing
HCV-327-S	1025'		X		
HCV-329-S	1025'		X		
HCV-331-S	1025'		X		
HCV-333-S	1025'		X		
HCV-1040-S-1	1041'	X			
HCV-1040-S-2	1041'	X			
HCV-1040-S-3	1041'	X			
HCV-1040-S-4	1041'	X			
HCV-1040-S-5	1041'	X			
RCS-3A	996'		X		
RCS-16	1015'		X		
RCS-29	1047'		X		
RCS-29A	1045'		X		
SIS-112-C	1111'-6"		X		
SIS-112-D	1111'-6"		X		
SIS-112-E	1111'-6"		X		
SIS-112-F	1111'-6"		X		
SIS-114-A	1074'		X		
SIS-114-B	1074'		X		
SIS-114-E	1074'		X		
SIS-114-F	1074'		X		

3.0 SURVEILLANCE REQUIREMENTS

3.14 Shock Suppressors (Snubbers)

Applicability

This specification applies to all hydraulic snubbers on the reactor coolant and safety-related systems listed in Table 2-6 (a) and (b).

Objective

The objective of this specification is to insure the overall integrity and operability of safety-related hydraulic snubbers.

Specifications

(1) All hydraulic snubbers whose seal material has been demonstrated by operating experience, lab testing or analysis to be compatible with the operating environment shall be visually inspected. This inspection shall include, but not necessarily be limited to, inspection of the hydraulic fluid reservoir, fluid connections, and linkage connections to the piping and anchor to verify snubber operability. In those locations where snubber movement can be manually induced without disconnecting the snubber, verify that the snubber has freedom of movement and is not frozen up. Visual inspections shall be performed in accordance with the following schedule:

Number of Hydraulic Snubbers Found Inoperable During Inspection or During Inspection Interval	Next Required Inspection Interval
0	18 months $\pm$ 25%
1	12 months $\pm$ 25%
2	6 months $\pm$ 25%
3, 4	124 days $\pm$ 25%
5, 6, 7	62 days $\pm$ 25%
$\geq$ 8	31 days $\pm$ 25%

The required inspection interval shall not be lengthened more than one step at a time.

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.

(2) All hydraulic snubbers whose seal materials are other than eythlene propylene or other material that has been demonstrated to be compatible with the operating environment shall be visually inspected for operability every 31 days.

3.0 SURVEILLANCE REQUIREMENTS

3.14 Shock Suppressors (Snubbers) (Continued)

(3) At least once per 18 months during shutdown, a representative sample of 88 snubbers shall be functionally tested either in-place or in a bench test. For each number of snubbers above 3 which does not meet the functional test acceptance criteria, an additional sample selected according to the expression 22(a-3) shall be functionally tested, where a is the total number of snubbers found inoperable during the functional testing of the representative sample. For each inoperable snubber found during a resample test, an additional 22 snubbers will be tested until no additional inoperable snubbers are found within a sample or until all snubbers in Table 2-6 (a) and (b) have been functionally tested.

The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity of snubbers. At least 25% of the snubbers in the representative sample shall include snubbers from any of the following three categories:

(a) The first snubber away from each reactor vessel nozzle.

(b) Snubbers within 5 feet of heavy equipment (valve, pump, turbine, motor, etc).

(c) Snubbers within 10 feet of the discharge from a safety relief valve.

Snubbers identified in Table 2-6 (a) and (b) as "Especially Difficult to Remove" or in "High Radiation Zones During Shutdown" shall also be included in the representative sample.*

In addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next test period. If a spare snubber has been installed in place of a failed snubber, then both the failed snubber (if it is repaired and installed in another position) and the spare snubber shall be retested. Test results of these snubbers may not be included for the resampling.

*Permanent or other exemptions from functional testing for individual snubbers in these categories may be granted by the Commission only if a justifiable basis for exemption is presented and/or snubber life destructive testing was performed to qualify snubber operability for all design conditions at either the completion of their fabrication or at a subsequent date.

3.14 Shock Suppressors (Snubbers) (Continued)

If any snubber selected for functional testing either fails to lockup or fails to move, i.e., is frozen in place, the cause will be evaluated. If the cause is a manufacturer or design deficiency, appropriate action shall be taken for snubbers of the same design subject to the same defect to determine if any more defects exist. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test acceptance criteria.

For any snubber(s) found locked up during normal operation or found inoperable following a seismic event, an engineering evaluation shall be performed on the components which are supported by the snubber(s). The purpose of this engineering evaluation shall be to determine if the components supported by the snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the supported component remains capable of meeting the designed service. If the engineering evaluation shows the components to be capable of meeting the designed service without the failed snubber, that snubber may be deleted from service and Table 2-6(a) and (b) per Specification 2.18(4).

(4) Snubber Service Life Monitoring

A record of the service life of each snubber, the date at which the designated service life commences and the installation and maintenance records on which the designated service life is based shall be maintained as required by Specification 5.10.2 m. At least once per 18 months the installation and maintenance record for each snubber listed in Table 2-6(a) and (b) shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review. If the indicated service life will be exceeded prior to the next scheduled snubber service life review, the snubber service life shall be re-evaluated or the snubber shall be replaced or reconditioned so as to extend its service life beyond the date of the next scheduled service life review. This re-evaluation, replacement or reconditioning shall be indicated in the records.

Basis

All snubbers listed in Table 2-6(a) and (b) are required operable to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on non-safety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to systems. Therefore the required inspection interval varies inversely with the observed snubber failures and is determined by the number of inoperable snubbers found during an 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 performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

When a snubber is found locked up or frozen in place or when a snubber has been inoperable during a seismic event, an engineering evaluation shall be performed, in addition to the determination of the snubber mode of failure. The purpose of the engineering evaluation is to determine if any safety-related component or system has been adversely affected by the inoperability of the snubber. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

To provide assurance of snubber functional reliability, a representative sample of the installed snubbers will be functionally tested during plant shutdowns at 18 month intervals. Selection of a representative sample according to the expression $35(1+c/2)$* provides a confidence level of approximately 95% that 90% to 100% of the snubbers in the plant will be operable within acceptance limits. Observed failures of these sample snubbers shall require functional testing of additional units. For each number of snubbers above c which does not meet the functional test acceptance criteria, an additional sample selected according to the expression $35(1+c/2)(2/(c+1))^2(a-c)$ will be functionally tested, where a is the total number of snubbers found inoperable during the functional testing of the representative sample. Functional testing will continue according to the expression $b(35(1+c/2)(2/(c+1))^2)$ where b is the number of snubbers found inoperable in the previous resample, until no additional inoperable snubbers are found within a sample or until all snubbers in Table 2-6 have been functionally tested.

Hydraulic snubbers and mechanical snubbers will each be treated as a different entity for the above surveillance programs.

The service life of a snubber is evaluated via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc.). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions.. These records will provide statistical bases for future consideration of snubber service life. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.

*The value c will be arbitrarily chosen by the applicant and incorporated into the expression for the representative sample and for the resample prior to the issuance of the Technical Specifications.

5.10.2 The following records shall be retained for the duration of the Facility Operating License:

a. Records of drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of facility radiation and contamination surveys.

d. Records of radiation exposure for all individuals entering radiation control areas.

e. Records of gaseous and liquid radioactive material released to the environs.

f. Records of transient or operational cycles for those facility components designed for a limited number of transients or cycles.

g. Records of training and qualification for current members of the plant staff.

h. Records of in-service inspections performed pursuant to these Technical Specifications.

i. Records of Quality Assurance activities required by the QA Manual.

j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

k. Records of meetings of the Plant Review Committee and the Safety Audit and Review Committee.

l. Records of Environmental Qualification which are covered under the provisions of Section 5.12 of these Technical Specifications.

m. Records of the service lives of all hydraulic and mechanical snubbers listed on Table 2-6 (a) and (b) including the date at which the service life commences and associated installation and maintenance records.

5.11 Radiation Protection Program

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.