Attachment No. 1 to AEP:NRC:00504
Revised Technical Specifications-Cook Unit No. 1

3/4.7.8 SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.8 All snubbers listed in Table 3.7-4 shall be OPERABLE

APPLICABILITY: MODES 1, 2, 3 and 4. (MODES 5 and 6 for snubbers located on systems required OPERABLE in those MODES).

ACTION:

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 4.7.8.C on the supported component or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

4.7.8 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.5.

a. Visual Inspections

The first inservice visual inspection of snubbers shall be performed after four months but within 10 months of commencing POWER OPERATION and shall include all snubbers listed in Table 3.7-4. If less than two (2) snubbers are found inoperable during the first inservice visual inspection shall be performed 12 months ± 25% from the date of the first inspection. Otherwise, subsequent visual inspections shall be performed in accordance with the following schedule:

No. Inoperable Snubbers per Inspection Period	Subsequent Visual Inspection Period*#
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3,4	124 days ± 25%
5,6,7	62 days ± 25%
8 or more	31 days ± 25%

The snubbers may be categorized into two groups: Those accessible and those inaccessible during reactor operation. Each group may be inspected independently in accordance with the above schedule.

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

#The provisions of Specification 4.0.2 are not applicable.

SURVEILLANCE REQUIREMENTS (Continued)

b. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are secure, and (3) in those locations where snubber movement can be manually induced without disconnecting the snubber, that the snubber has freedom of movement and is not frozen up. Snubbers which appear inoperable as a result of visual inspections may be determined 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 snubbers that may be generically susceptible; and (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specifications 4.7.8.d However, when the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined inoperable and cannot be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection interval. All snubbers connected to an inoperable common hydraulic fluid reservoir shall be counted as inoperable snubbers.

c. Functional Tests

At least once per 18 months during shutdown, a representative sample (10% of the total of each type of snubber in use in the plant shall be functionally tested either in place or in a bench test. For each snubber that does not meet the functional test acceptance criteria of Specification 4.7.8.d an additional 10% of that type of Snubber shall be 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 the following three categories:

1. The first snubber away from each reactor vessel nozzle
2. Snubbers within 5 feet of heavy equipment (valve, pump, turbine, motor, etc.)
3. Snubbers within 10 feet of the discharge from a safety relief valve

Snubbers identified in Table 3.7-4 as "Especially Difficult to Remove" or in "High Radiation Zones During Shutdown" shall also be included in the representative sample.*

*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.

SURVEILLANCE REQUIREMENTS (Continued)

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 re-sampling.

If any snubber selected for functional testing either fails to lockup or fails to move, i.e., frozen in place, the cause will be evaluated and if caused by manufacturer or design efficiency all snubbers of the same design subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test acceptance criteria.

For the snubber(s) found inoperable, 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.

d. Hydraulic Snubbers Functional Test Acceptance Criteria

The hydraulic snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.

2. Snubber bleed, or release rate, where required, is within the specified range in compression or tension. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

e. 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 6.10.2.

Concurrent with the first inservice visual inspection and at least once per 18 months thereafter, the installation and maintenance records for each snubber listed in Table 3.7-4 and 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 reevaluated 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 reevaluation, replacement or reconditioning shall be indicated in the records.

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
1	1-GRC-S519	REACTOR COOLANT . ELEV.683'-5 1/2" IN PRESSURIZER ENCLOSURE	I	No	No
2	1-GRC-S537	REACTOR COOLANT AZ 25° ELEV. 610'-5" BETWEEN STEM. GEN. No. 1 AND RC PUMP No. 1	I	YES	No
3	1-GRC-S538	REACTOR COOLANT AZ 41° ELEV. 614'-10" BELOW STM. GEN. No. 1	I	No	No
4	1-GRC-S555	REACTOR COOLANT AZ 141° ELEV. 614'-2" BELOW STM. GEN. No. 2	I	No	No
5	1-GRC-S562	REACTOR COOLANT AZ 154° ELEV. 610'-5" BETWEEN STM. GEN. No. 2 AND RC PUMP No. 2	I	YES	No
6	1-GRC-S564	REACTOR COOLANT AZ 313° ELEV. 614'-10 1/8" BELOW STM. GEN. No. 4	I	No	No
7	1-GRC-S566	REACTOR COOLANT AZ 332° ELEV. 610'-5" BETWEEN STM. GEN. No. 4 AND RC PUMP No. 4	I	YES	No
8	1-GRC-S573	REACTOR COOLANT AZ 223° ELEV. 614'-10 1/8" BELOW STM. GEN. No. 3	I	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
9	1-GRC-S575	Reactor Coolant Az 208° Elev. 610'-5" between stm. Gen. No. 3 and RC pump No. 3	I	Yes	No
10	1-GRC-S582	Reactor Coolant Az 212° Elev. 617'-4" near Reactor Cavity Wall, agross from Stm. Gen. No. 3	I	Yes	No
11	1-GRC-S587	Reactor Coolant Az 260° Elev. 622'-4 1/4" in Containment	I	No	No
12	1-GRC-S592	Reactor Coolant Az 292° Elev. 683'-6 3/4 in Pressurizer Enclosure.	I	No	No
13	1-GRC-S594	Reactor Coolant Az 292° Elev. 691'-9" in Pressurizer Enclosure.	I	No	No
14	1-GRC-S596	Reactor Coolant Az 285° Elev. 691'-9" in Pressurizer Enclosure.	I	No	No
15	1-GRC-S598	Reactor Coolant Az 292° Elev. 670'-3 3/4" in Pressurizer Enclosure.	I	No	Yes
16	1-GRC-S599	Reactor Coolant Az 287° Elev. 672'-4" in Pressurizer Enclosure.	I	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
17	1-GRC-S604	Reactor Coolant Az 286° Elev. 688'-10" in Pressurizer Enclosure.	I	No	No
18	1-GRC-S608	Reactor Coolant Az 286° Elev. 693'-0" in Pressurizer Enclosure.	I	No	No
19	1-GRC-S614	Reactor Coolant Az 282° Elev. 681'-0" in Pressurizer Enclosure.	I	No	No
20	1-FW-S1	Feedwater Az 31° Elev. 634'-9" Behind Stm Gen. No. 1	I	No	No
21	1-FW-S2(L)	Feedwater Az 26° Elev. 633'-6" Behind Stm. Gen. No. 1	I	No	No
22	1-FW-S2(U)	Feedwater Az 26° Elev. 636'-0" Behind Stm Gen. No. 1	I	No	No
23	1-FW-S3	Feedwater Az 20° Elev. 629'-9" Behind Stm. Gen. No. 1	I	No	No
24	1-FW-S4(L)	Feedwater Az 154° Elev. 636'-8 3/8" Behind Stm. Gen. No. 2	I	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
25	1-FW-S4(U)	FEEDWATER AZ 154° ELEV. 640'-8 3/8" BEHIND STM. GEN. No. 2	I	No	No
26	1-FW-S5	FEEDWATER AZ 163° ELEV. 634'-9" BEHIND STM. GEN. No. 2	I	No	No
27	1-FW-S6	FEEDWATER AZ 157° ELEV. 629'-9" BEHIND STM. GEN. No. 2	I	No	No
28	1-FW-S7	FEEDWATER AZ 204° ELEV. 634'-9" BEHIND STM. GEN. No. 3	I	No	No
29	1-FW-S8(L)	FEEDWATER AZ 200° ELEV. 633'-6" BEHIND STM. GEN. No. 3	I	No	No
30	1-FW-S8(U)	FEEDWATER AZ 200° ELEV. 636'-0" BEHIND STM. GEN. No. 3	I	No	No
31	1-FW-S9	FEEDWATER AZ 194° ELEV. 629'-9" BEHIND STM. GEN. No. 3	I	No	No
32	1-FW-S10(L)	FEEDWATER AZ 334° ELEV. 633'-6" BEHIND STM. GEN. No. 4	I	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
33	1-FW-S10(U)	Feedwater Az 334° Elev. 636'-0" Behind Stm. Gen. No. 4	I	No	No
34	1-FW-S11	Feedwater Az 330° Elev. 634'-9" Behind Stm. Gen. No. 4	I	No	No
35	1-FW-S12	Feedwater Az 343° Elev. 629'-9" Behind Stm. Gen. No. 4	I	No	No
36	1-GCS-S634	Chem&Vol. Control Az 292° Elev. 613' in Containment	I	Yes	No
37	1-GCS-S637	Chem&Vol. Control Az 71° Elev. 608'-10" in Annulus.	A	No	No
38	1-GCS-S757	RC pump Seal Water Supply, Between RC Pump No. 2 and Crane Wall, immediately under grating Az 123° Elev. 612'-7 1/8"	I	No	No
39	1-MSS-1	Main steam Az 8° Elev. 639'-1 1/4" between Stm Gen. No. 1 and No. 4	I	No	No
40	1-MSS-2	Main steam Az 17° Elev. 635' between Stm. Gen. No. 1 and No. 4	I	No	No
41	1-MSS-3	Main steam Az 172° Elev. 639'-1 1/4" Behind Stm. Gen. No. 1	I	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
42	1-MSS-4	Main steam Az 165° Elev. 635' Between Stm Gen. No. 2 and No.3	I	No	No
43	1-MSS-5	Main steam Az 191° Elev. 635' Between Stm.Gen.No.2 and No.3	I	No	No
44	1-MSS-6	Main steam Az 184° Elev. 639'-1 1/4" between Stm. Gen. No. 2 and No. 3	I	No	No
45	1-MSS-7	Main steam Az 349° Elev. 635' Behind Stm.Gen.No.1 and No.4	I	No	No
46	1-MSS-8	Main steam Az 356° Elev. 639'-1 1/4" between Stm Gen. No. 1 and No. 4	A	No	No
47	1-GCCW-S278	Component Cooling Water Elev. 609' in CCW pump area	A	No	No
48	1-GCCW-S309	Component Cooling Water Elev. 597'-1 5/8" in passageway near sampling room Aux. Bldg.	A	No	Yes
49	1-GCCW-S837	Component Cooling Water Elev. 621'-0" in CCW pump area	A	No	No
50	1-GCCW-S838	Component Cooling Water Elev. 621'-0" in CCW pump area	A	No	No
51	1-GCCW-S839	Component Cooling Water Elev. 621'-0" in CCW pump Area	A	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
52	1-GCCW-S840	Component Cooling Water Elev. 621'-0" in CCW pump area	A	No	No
53	1-GCCW-S841	Component Cooling Water Elev. 621'-0" in CCW pump area	A	No	No
54	1-GCCW-S842	Component Cooling Water Elev. 621'-0" in CCW pump area	A	No	No
55	1-GCCW-S844	Component Cooling Water Elev. 609'-0" in CCW pump area	A	No	No
56	1-GBD-S563	Stm. Gen. Blowdown Az 277° Elev. 608'-6 1/2" in Annulus	A	No	No
57	1-GBD-S569	Stm. Gen. Blowdown Az 278° Elev. 608'-6 1/2" in Annulus	A	No	No
58	1-GBD-S573	Stm. Gen. Blowdown Az 181° Elev. 607'-10 1/2" in Annulus	A	No	No
59	1-GBD-S574	Stm. Gen. Blowdown Az 181° Elev. 607'-10 1/2" in Annulus	A	No	No
60	1-GRH-S7A	Residual Heat Removal Elev. 581'-8 1/2" in 1-E RHR pump room	A	No	No
61	1-GRH-S7B	Residual Heat Removal Elev. 581'-4" in 1-E RHR pump room	A	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
62	1-GRH-S47	Residual Heat Removal Elev. 581' in 1-W RHR pump room	A	No	No
63	1-GRH-S48	Residual Heat Removal Elev. 580'-6" in 1-W RHR pump room	A	No	No
64	1-GDG-S13	1-AB Emerg. Diesel Exhaust Elev. 596'-7 3/8"	A	No	No
65	1-GDG-S14	1-AB Emerg. Diesel Exhaust Elev. 603'-6"	A	No	No
66	1-GSI-S103	Safety Injection Elev. 573' in 1-E RHR pump room	A	No	Yes
67	1-GSI-S128	Safety Injection Elev. 573' in 1-E RHR pump room	A	No	Yes
68	1-GSI-S575	Safety Injection Elev. 598'-9 3/8" Az 66° in Annulus	A	No	No
69	1-GSI-S657	Safety Injection Az 185° Elev. 610'-0" in Annulus	A	No	No
70	1-GSI-S707	Safety Injection Az 228° Elev. 608'-4 7/8" Behind RC pump No. 3	I	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
71	1-GCTS-S73(E)	CONTAINMENT SPRAY ELEV. 582'-0" IN 1-E CONTAINMENT SPRAY PUMP ROOM	A	No	No
72	1-GCTS-S73(W)	CONTAINMENT SPRAY ELEV. 582'-0" IN 1-E CONTAINMENT SPRAY PUMP ROOM	A	No	No
73	1-GCTS-S76(B)	CONTAINMENT SPRAY ELEV. 579'-6" INSIDE LEAK DETECTOR BOX, PIPE CHASE	A	No	No
74	1-GCTS-S76(A)	CONTAINMENT SPRAY ELEV. 579'-6" INSIDE LEAK DETECTOR BOX, PIPE CHASE	A	No	No
75	1-GCTS-S160A (N)	CONTAINMENT SPRAY ELEV. 582'-0" INSIDE LEAK DETECTOR BOX, PIPE CHASE	A	No	No
76	1-GCTS-S160A (S)	CONTAINMENT SPRAY ELEV. 582'-0" INSIDE LEAK DETECTOR BOX, PIPE CHASE	A	No	No
77	1-GCTS-S161 (E)	CONTAINMENT SPRAY ELEV. 579'-6" IN 1-W CONTAINMENT SPRAY PUMP ROOM	A	No	No
78	1-GCTS-S161 (W)	CONTAINMENT SPRAY ELEV. 579'-6" IN 1-W CONTAINMENT SPRAY PUMP ROOM	A	No	No

D.C. COOK PLANT – UNIT NO. 1

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
79	N/A	Steam Generator No. 1 Elev. 665'.	I	No	Yes
80	N/A	Steam Generator No. 1 Elev. 665'.	I	No	Yes
81	N/A	Steam Generator No. 1 Elev. 665'.	I	No	Yes
82	N/A	Steam Generator No. 1 Elev. 665'	I	No	Yes
83	N/A	Steam Generator No. 2 Elev. 665'	I	No	Yes
84	N/A	Steam Generator No. 2 Elev. 665'.	I	No	Yes
85	N/A	Steam Generator No. 2 Elev. 665'.	I	No	Yes
86	N/A	Steam Generator No. 2 Elev. 665'.	I	No	Yes
87	N/A	Steam Generator No. 3 Elev. 665'.	I	No	Yes
88	N/A	Steam Generator No. 3 Elev. 665'.	I	No	Yes
89	N/A	Steam Generator No. 3 Elev. 665'.	I	No	Yes

D.C. COOK PLANT – UNIT NO. 1

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
90	N/A	Steam Generator No. 3 Elev. 665'4	I	No	Yes
91	N/A	Steam Generator No. 4 Elev. 665'.	I	No	Yes
92	N/A	Steam Generator No. 4 Elev. 665'.	I	No	Yes
93	N/A	Steam Generator No. 4 Elev. 665'.	I	No	Yes
94	N/A	Steam Generator No. 4 Elev. 665'.	I	No	Yes

* Snubbers may be added to safety related systems without prior License Amendment to Table 3.7-4 provided that a revision to Table 3.7-4 is included with the next License Amendment request.

Modifications to the "High Radiation Zone" column due to changes in high radiation areas may be made without prior License Amendment provided that a revision to Table 3.7-4 is included with the next License Amendment request.

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 identified in Table 5.9-1.

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 PNSRC and the NSDRC.

l. Records for Environmental Qualification which are covered under the provisions of paragraph 6.13.

m. Records of the service lives of hydraulic snubbers listed on Table 3.7-4 including the date at which service life commences and associated installation and maintenance records.

6.11 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.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c) (2) of 10 CFR 20:

a. A High Radiation Area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a High Radiation Area and entrance thereto shall be controlled by issuance of a Radiation Work Permit and any individual or group of individuals permitted to enter such areas shall be provided with a radiation monitoring device which continuously indicates the radiation dose rate in the area.

b. A High Radiation Area is which the intensity of radiation is greater than 1000 mrem/hr shall be subject to the provisions of 6.13.1.a above, and in addition locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Operating Engineer on duty.

6.13 ENVIRONMENTAL QUALIFICATION

6.13.1 By no later than June 30, 1982 all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of: Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0588 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," December 1979. Copies of these documents are attached to Order for Modification of License No. DPR-74 dated October 24, 1980.

16.13.2 By no later than December 1, 1980, complete and auditible records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.

3/4.7.8 HYDRAULIC SNUBBERS

All snubbers 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 nonsafety-related systems and then only if their failure of 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 required a shorter inspection interval will override the previous schedule.

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, in addition to the determination of the snubber mode of failure, in order to determine if any safety-related component or system has been adversly 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. Observed failures of these sample snubbers shall require functional testing of additional units.

The service life of a snubber is evaluated via manufactured 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.

3/4.7.9 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occuring in any portion of the facility where safety related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, CO_2, Halon and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service.

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

3/4.7.10 PENETRATION FIRE BARRIERS

The functional integrity of the penetration fire barriers ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. This design feature minimizes the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishment. The penetration fire barriers are a passive element in the facility fire protection program and are subject to periodic inspections.

During periods of time when the barriers are not functional, a continuous fire watch is required to be maintained in the vicinity of the affected barrier until the barrier is restored to functional status.

Attachment No. 2 to AEP:NRC:00504
Revised Technical Specifications-Cook Unit No. 2

3/4.7.7 SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.7.1 All snubbers listed in Table 3.7-9 shall be OPERABLE

APPLICABILITY: MODES 1, 2, 3 and 4. (MODES 5 and 6 for snubbers located on systems required OPERABLE in those MODES).

ACTION:

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 4.7.7.1c on the supported component or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

4.7.7.1 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.5.

a. Visual Inspections

The first inservice visual inspection of snubbers shall be performed after four months but within 10 months of commencing POWER OPERATION and shall include all snubbers listed in Table 3.7-9. If less than two (2) snubbers are found inoperable during the first inservice visual inspection, the second inservice visual inspection shall be performed 12 months ± 25% from the date of the first inspection. Otherwise, subsequent visual inspections shall be performed in accordance with the following schedule:

No. Inoperable Snubbers per Inspection Period	Subsequent Visual Inspection Period*#
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3,4	124 days ± 25%
5,6,7	62 days ± 25%
8 or more	31 days ± 25%

The snubbers may be categorized into two groups: Those accessible and those inaccessible during reactor operation. Each group may be inspected independently in accordance with the above schedule.

*The inspection interval shall be lengthened more than one step at a time.

#The provisions of Specification 4.0.2 are not applicable.

SURVEILLANCE REQUIREMENTS (Continued)

b. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are secure, and (3) in those locations where snubber movement can be manually induced without disconnecting the snubber, that the snubber has freedom of movement and is not frozen up. Snubbers which appear inoperable as a result of visual inspections may be determined 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 snubbers that may be generically susceptible; and (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specification 4.7.7.1.d as applicable. However, when the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined inoperable and cannot be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection interval. All snubbers connected to an inoperable common hydraulic fluid reservoir shall be counted as inoperable snubbers.

c. Functional Tests

At least once per 18 months during shutdown, a representative sample (10% of the total of each type of snubber in use in the plant shall be functionally tested either in place or in a bench test. For each snubber that does not meet the functional test acceptance criteria of Specification 4.7.7.1.d an additional 10% of that type of snubber shall be 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 the following three categories:

1. The first snubber away from each reactor vessel nozzle
2. Snubbers within 5 feet of heavy equipment (valve, pump, turbine, motor, etc.)
3. Snubbers within 10 feet of the discharge from a safety relief valve

Snubbers identified in Table 3.7-9 as "Especially Difficult to Remove" or in "High Radiation Zones During Shutdown" shall also be included in the representative sample.*

*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.

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 re-sampling.

If any snubber selected for functional testing either fails to lockup or fails to move, i.e., frozen in place, the cause will be evaluated and if caused by manufacturer or design deficiency all snubbers of the same design subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test acceptance criteria.

For the snubber(s) found inoperable, 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.

d. Hydraulic Snubbers Functional Test Acceptance Criteria

The hydraulic snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.

2. Snubber bleed, or release rate, where required, is within the specified range in compression or tension. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

e. 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 6.10.2.

Concurrent with the first inservice visual inspection and at least once per 18 months thereafter, the installation and maintenance records for each snubber listed in Table 3.7-9 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 reevaluated 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 reevaluation, replacement or reconditioning shall be indicated in the records.

TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
1	2-GRC-S537	Reactor Coolant Az 25° Elev. 610'-5" Stm Gen. No. 1	I	NO	NO
2	2-GRC-S538	Reactor Coolant Az 41° Elev. 614'-10" RC Pump No. 1	I	YES	NO
3	2-GRC-S555	Reactor Coolant Az 141° Elev. 614'-10 1/8" RC Pump No. 2	I	YES	NO
4	2-GRC-S562	Reactor Coolant Az 154° Elev. 610'-5" Stm Gen. No. 2	I	NO	NO
5	2-GRC-S564	Reactor Coolant Az 317° Elev. 614'-10 1/8" RC Pump No. 4	I	NO	NO
6	2-GRC-S566	Reactor Coolant Az 331° Elev. 610'-5" Stm. Gen. No. 4	I	NO	NO
7	2-GRC-S573	Reactor Coolant Az 223° Elev. 614'-10 1/8" RC Pump No. 3	I	YES	NO
8	2-GRC-S575	Reactor Coolant Az 208° Elev. 610'-5" Stm. Gen. No. 3	I	NO	NO
9	2-GRC-S582	Reactor Coolant Az 208° Elev. 617'-4-7/8" Stm. Gen. No. 3	I	YES	NO
10	2-GRC-S592	Reactor Coolant Az 282° Elev. 683'-3 1/8" in Pressurizer Enclosure	I	NO	NO

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TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
11	2-GRC-S594	Reactor Coolant Az 291° Elev. 683'-3 9/16" in Pressurizer Enclosure	I	NO	NO
12	2-GRC-S596	Reactor Coolant Az 292° Elev. 682'-11 1/8" in Pressurizer Enclosure	I	NO	NO
13	2-GRC-S598	Reactor Coolant Az 279° Elev. 671'-5 1/4" in Pressurizer Enclosure	I	NO	YES
14	2-GRC-S599	Reactor Coolant Az 289° Elev. 672'-4 1/2" in Pressurizer Enclosure	I	NO	NO
15	2-GRC-S609	Reactor Coolant Az 283° Elev. 689'-. 5/16" in Pressurizer Enclosure	I	NO	NO
16	2-GRC-S611	Reactor Coolant Az 294° Elev. 681'-8 7/8" in Pressurizer Enclosure	I	NO	NO
17	2-GRC-S623	Reactor Coolant Az 277° Elev. 682'-9 1/16" in Pressurizer Enclosure	I	NO	NO
18	2-GRC-S624	Reactor Coolant Az 247° Elev. 615'-6" above relief tank	I	NO	NO

TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICUL REMOVE
19	2-GRC-S626	REACTOR COOLANT Az 284° ELEV. 692'- 3/16" IN PRESSURIZER ENCLOSURE	I	NO	NO
20	2-GRC-S629	REACTOR COOLANT Az 283° ELEV. 687'-4 1/16" IN PRESSURIZER ENCLOSURE	I	NO	NO
21	2-GRC-S630	REACTOR COOLANT Az 291° ELEV. 672'-7 11/16" IN PRESSURIZER ENCLOSURE	I	NO	NO
22	2-GRC-S632	REACTOR COOLANT Az 291° ELEV. 669'-3 11/16" IN PRESSURIZER ENCLOSURE	I	NO	NO
23	2-GRC-S631	REACTOR COOLANT Az 291° ELEV. 670'-11 11/16" IN PRESSURIZER ENCLOSURE	I	NO	NO
24	2-GRC-S587	REACTOR COOLANT Az 260° ELEV. 622'-4 1/4" BY RELIEF TANK	I	NO	NO
25	2-FW-S1	FEEDWATER Az 31° ELEV. 634'-9" NEAR STM. GEN. No. 1	I	NO	NO
26	2-FW-S2(L)	FEEDWATER Az 26° ELEV. 633'-6" NEAR STM. GEN. No. 1	I	NO	NO

TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFIC TO REMOVE
27	2-FW-S2(U)	FEEDWATER Az 26° ELEV. 636'-0" NEAR STM. GEN. No. 1	I	NO	NO
28	2-FW-S3	FEEDWATER Az 20° ELEV. 629'-9" NEAR STM. GEN. No. 1	I	NO	NO
29	2-FW-S4(L)	FEEDWATER Az 155° ELEV. 637'-0" NEAR STM. GEN. No. 2	I	NO	NO
30	2-FW-S4(U)	FEEDWATER Az 155° ELEV. 641'-0" NEAR STM. GEN. No. 2	I	NO	NO
31	2-FW-S5	FEEDWATER Az 163° ELEV. 634'-9" NEAR STM. GEN. No. 2	I	NO	NO
32	2-FW-S6	FEEDWATER Az 157° ELEV. 629'-9" NEAR STM. GEN. No. 2	I	NO	NO
33	2-FW-S7	FEEDWATER Az 204° ELEV. 634'-9" NEAR STM. GEN. No. 3	I	NO	NO
34	2-FW-S8(L)	FEEDWATER Az 200° ELEV. 633'-6" NEAR STM. GEN. No. 3	I	NO	NO
35	2-FW-S8(U)	FEEDWATER Az 200° ELEV. 636'-0" NEAR STM. GEN. No. 3	I	NO	NO

TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
36	2-FW-S9	FEEDWATER Az 194° ELEV. 629'-9" NEAR STM. GEN. No. 3	I	NO	NO
37	2-FW-S10(L)	FEEDWATER Az 334° ELEV. 634'-0" NEAR STM. GEN. No. 4	I	NO	NO
38	2-FW-S10(U)	FEEDWATER Az 334° ELEV. 636'-7" NEAR STM. GEN. No. 4	I	NO	NO
39	2-FW-S11	FEEDWATER Az 330° ELEV. 634'-9" NEAR STM. GEN. No. 4	I	NO	NO
40	2-FW-S12	FEEDWATER Az 343° ELEV. 629'-9" NEAR STM. GEN. No. 4	I	NO	NO
41	2-GBD-S563(L)	STM. GEN. BLOWDOWN Az 275° ELEV. 607'-11" IN ANNULUS	I	NO	NO
42	2-GBD-S563(U)	STM. GEN. BLOWDOWN Az 275° ELEV. 608'-6" IN ANNULUS	I	NO	NO
43	2-GBD-S569(L)	STM. GEN. BLOWDOWN Az 275° ELEV. 607'-11" IN ANNULUS	I	NO	NO
44	2-GBD-S569(U)	STM. GEN. BLOWDOWN Az 275° ELEV. 608'-6" IN ANNULUS	I	NO	NO
45	2-GBD-S568	STM. GEN. BLOWDOWN Az 264° ELEV. 608'-1" IN ANNULUS	I	NO	NO

TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
46	2-GRH-S6	Residual Heat Removal Elev. 581'-6" RHR Pump Room 2E	A	NO	NO
47	2-GRH-S7	Residual Heat Removal Elev. 581'-3" RHR Pump Room 2E	A	NO	NO
48	2-GRH-S24	Residual Heat Removal Elev. 581'-0" RHR Pump Room 2W	A	NO	NO
49	2-GRH-S25	Residual Heat Removal Elev. 580'-6" RHR Pump Room 2W	A	NO	NO
50	2-GCCW-S274	Component Cooling Water Elev. 621'-0" CCW Pump Area	A	NO	NO
51	2-GCCW-S308	Component Cooling Water Elev. 610'-1/2" CCW Pump Area	A	NO	NO
52	2-GCCW-S317	Component Cooling Water Elev. 621'-0" CCW Pump Area	A	NO	NO
53	2-GCCW-S320	Component Cooling Water Elev. 610'-6" CCW Pump Area	A	NO	NO
54	2-GCCW-S519	Component Cooling Water Az 132° Elev. 623'-4" RC Pump Area	A	NO	NO
55	2-GCCW-S521	Component Cooling Water Az 132° Elev. 624'-9" RC Pump Area	A	NO	NO
56	2-GCCW-S550	Component Cooling Water Az 308° Elev. 619'-3" RC Pump Area	A	NO	NO

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TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
57	2-GCCW-S838	COMPONENT COOLING WATER ELEV. 621'-0" CCW PUMP AREA	A	NO	NO
58	2-GCCW-S839	COMPONENT COOLING WATER ELEV. 621'-0" CCW PUMP AREA	A	NO	NO
59	2-GCCW-S840	COMPONENT COOLING WATER ELEV. 620'-0" CCW PUMP AREA	A	NO	NO
60	2-GCCW-S843	COMPONENT COOLING WATER ELEV. 620'-5" CCW PUMP AREA	A	NO	NO
61	2-GCCW-S306	COMPONENT COOLING WATER ELEV. 596'-2 3/8" CCW PUMP AREA	A	NO	NO
62	2-GCS-S634	CHEM&VOL. CONTROL AZ 299° ELEV. 613'-1" IN ANNULUS	A	NO	NO
63	2-GCS-S637	CHEM&VOL. CONTROL AZ 72° ELEV. 608'-10" IN ANNULUS	I	NO	NO
64	2-GCS-S729	CHEM&VOL. CONTROL AZ 234° ELEV. 617'-0" RC PUMP AREA	I	NO	NO
65	2-MSS-1	MAIN STEAM AZ 8° ELEV. 639'-1 1/4" BETWEEN STM. GEN. NO. 1 AND 4	I	NO	NO
66	2-MSS-2	MAIN STEAM AZ 17° ELEV. 635'-0" BETWEEN STM. GEN. NO. 1 AND 4	I	NO	NO

TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
67	2-MSS-3	MAIN STEAM AZ 172° ELEV. 639'-1 1/4" BETWEEN STM. GEN. NO. 2 AND 3	1	NO	NO
68	2-MSS-4	MAIN STEAM AZ 165° ELEV. 635'-0" BETWEEN STM. GEN. NO. 2 AND 3	1	NO	NO
69	2-MSS-5	MAIN STEAM AZ 191° ELEV. 635'-0" BETWEEN STM. GEN. NO. 2 AND 3	1	NO	NO
70	2-MSS-6	MAIN STEAM AZ 184° ELEV. 639'-1 1/4" BETWEEN STM. GEN. NO. 2 AND 3	1	NO	NO
71	2-MSS-7	MAIN STEAM AZ 349° ELEV. 635'-0" BETWEEN STM. GEN. NO. 1 AND 4	1	NO	NO
72	2-MSS-8	MAIN STEAM AZ 356° ELEV. 639'-1 1/4" BETWEEN STM. GEN. NO. 1 AND 4	1	NO	NO
73	2-GSI-S47	SAFETY INJECTION SYSTEM ELEV. 573'-0"	A	NO	YES
74	2-GSI-S51	SAFETY INJECTION SYSTEM ELEV. 573'-0"	A	NO	YES
75	2-GSI-S575	SAFETY INJECTION SYSTEM AZ 65° ELEV. 598'-9 3/8" IN ANNULUS	A	NO	NO

TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
76	2-GSI-S657	Safety Injection System Az 185° Elev. 610'-0" in Annulus	A	NO	NO
77	2-GSI-S707	Safety Injection System Az 221° Elev. 608'-7" near RC Pump No.3	I	NO	NO
78	2-GCTS-S61	Containment Spray Elev. 579'-3" CTS Pump Area	A	NO	NO
79	2-GCTS-S113(E)	Containment Spray Elev. 582'-0" CTS Pump Area	A	NO	NO
80	2-GCTS-S113)W)	Containment Spray Elev. 582'-0" CTS Pump Area	A	NO	NO
81	2-GCTS-S114(N)	Containment Spray Elev. 582'-0" inside leak detector box pipe chase	A	NO	NO
82	2-GCTS-S114(S)	Containment Spray Elev. 582'-0" inside leak detector box pipe chase	A	NO	NO
83	2-GCTS-S115(N)	Containment Spray Elev. 579'-6" inside leak detector box pipe chase	A	NO	NO
84	2-GCTS-S115(S)	Containment Spray Elev. 579'-6" inside leak detector box pipe chase	A	NO	NO

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TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
85	2-GCTS-S116(E)	CONTAINMENT SPRAY ELEV. 579'-6" INSIDE LEAK DETECTOR BOX PIPE CHASE	A	NO	NO
86	2-GCT-S116(W)	CONTAINMENT SPRAY ELEV. 579'-6" INSIDE LEAK DETECTOR BOX PIPE CHASE	A	NO	NO
87	N/A	STEAM GENERATOR No. 1 ELEV. 665'	I	NO	YES
88	N/A	STEAM GENERATOR No. 1 ELEV. 665'	I	NO	YES
89	N/A	STEAM GENERATOR No. 1 ELEV. 665'	I	NO	YES
90	N/A	STEAM GENERATOR No. 1 ELEV. 665'	I	NO	YES
91	N/A	STEAM GENERATOR No. 2 ELEV. 665'	I	NO	YES
92	N/A	STEAM GENERATOR No. 2 ELEV. 665'	I	NO	YES
93	N/A	STEAM GENERATOR No. 2 ELEV. 665'	I	NO	YES
94	N/A	STEAM GENERATOR No. 2 ELEV. 665'	I	NO	YES
95	N/A	STEAM GENERATOR No. 3 ELEV. 665'	I	NO	YES

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TABLE 3.7-9

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	HANGER MARK NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE	ESPECIALLY DIFFICULT TO REMOVE
96	N/A	Steam Generator No. 3 Elev. 665'.	I	NO	YES
97	N/A	Steam Generator No. 3 Elev. 665'.	I	NO	YES
98	N/A	Steam Generator No. 3 Elev. 665'.	I	NO	YES
99	N/A	Steam Generator No. 4 Elev. 665'.	I	NO	YES
100	N/A	Steam Generator No. 4 Elev. 665'.	I	NO	YES
101	N/A	Steam Generator No. 4 Elev. 665'.	I	NO	YES
102	N/A	Steam Generator No. 4 Elev. 665'.	I	NO	YES

* Snubbers may be added to safety related systems without prior License Amendment to Table 3.7-9 provided that a revision to Table 3.7-9 is included with the next License Amendment request.

Modifications to the "High Radiation Zone" column due to changes in high radiation areas may be made without prior License Amendment provided that a revision to Table 3.7-9 is included with the next License Amendment request.

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

f. Records of transient or operational cycles for those facility components identified in Table 5.7-1.

g. Records of reactor tests and experiments.

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

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

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

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

l. Records of meetings of the PNSRC and the NSDRC.

m. Records for Environmental Qualification which are covered under the provisions of paragraph 6.13.

n. Records of the service lives of hydraulic snubbers listed on Table 3.7-9 including the date at which service life commences and associated installation and maintenance records.

6.11 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.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded

6.12 HIGH RADIATION AREA

6.12.1 (Continued)
and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.

b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.

c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1, above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the Plant Health Physicist.

6.13 ENVIRONMENTAL QUALIFICATION

6.13.1 By no later than June 30, 1982 all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of: Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0588 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," December 1979. Copies of these documents are attached to Order for Modification of License No. DPR-58 dated October 24, 1980.

6.13.2 By no later than December 1, 1980, complete and auditible records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Thereafter, such records should be updated and maintained as current as equipment is replaced, further tested, or otherwise further qualified.

*Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

3/4.7.6 ESF VENTILATION SYSTEM

The OPERABILITY of the ESF ventilation system ensures that radioactive materials leaking from the ECCS equipment within the pump room following a LOCA are filtered prior to reaching the environment. The operation of this system and the resultant effect on offsite dosage calculations was assumed in the accident analyses.

3/4.7.7 HYDRAULIC SNUBBERS

All snubbers 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 nonsafety-related systems and then only if their failure of 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 required a shorter inspection interval will override the previous schedule.

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, in addition to the determination of the snubber mode of failure, in order 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.

BASES

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. Observed failures of these sample snubbers shall require functional testing of additional units.

The service life of a snubber is evaluated via manufactured 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.

3/4.7.8 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values.

3/4.7.9 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occuring in any portion of the facility where safety related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, CO_2, Halon and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service.

BASES

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

3/4.7.10 PENETRATION FIRE BARRIERS

The functional integrity of the penetration fire barriers ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. This design feature minimizes the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishment. The penetration fire barriers are a passive element in the facility fire protection program and are subject to periodic inspections.

During periods of time when the barriers are not functional, a continuous fire watch is required to be maintained in the vicinity of the affected barrier until the barrier is restored to functional status.