

ATTACHMENT A

UNIT 1 REVISED
TECHNICAL SPECIFICATION
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PLANT SYSTEMS

3/4.7.8 SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.8.1 All safety related snubbers¹ 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.b and c on the supported component or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

.1.

SURVEILLANCE REQUIREMENTS

4.7.8.1 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program ^{in addition to} the requirements of Specification 4.0.5. As used in this Specification, type of snubber shall mean snubbers of the same design and manufacturer, irrespective of capacity.

a. Visual inspections

Visual inspections shall be performed in accordance with the following schedule determined by Table 4.7-3. ^{INSERT A}

No. Inoperable Snubbers of
Each Type per Inspection Period

Subsequent Visual**
Inspection Period†

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%

8 or more

31 days \pm 25%

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

1 Safety related snubbers include those snubbers installed on safety related systems and snubbers on non-safety related systems if their failure or the failure of the system on which they are installed would have an adverse effect on any safety related system.

* A documented, visual inspection shall be sufficient to meet the requirements for an engineering evaluation. Additional analyses, as needed, shall be completed in a reasonable period of time.

** The inspection interval shall not be lengthened more than two steps at a time.

† The provisions of Specification 4.0.2 are not applicable.

INSERT "A" (for TECH SPEC 3/4.7.8.1.a)

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently or jointly according to the schedule determined by Table 4.7-3. The visual inspection interval for each population or category of snubbers shall be determined based upon the criteria provided in Table 4.7-3 and the first inspection interval determined using this criteria shall be based upon the previous inspection interval as established by the requirements in effect before amendment (*).

- * NRC will include the number of the license amendment that implements this change.

TABLE 4.7-3

SNUBBER VISUAL INSPECTION INTERVAL

Population or Category (Notes 1 and 2)	NUMBER OF UNDETECTABLE ^{INOPERABLE} SNUBBERS		
	Column A Extend Interval (Notes 3 and 6)	Column B Repeat Interval (Notes 4 and 6)	Column C Reduce Interval (Notes 5 and 6)
1	0	0	1
80	0	0	2
100	0	1	4
150	0	3	8
200	2	5	13
300	5	12	25
400	8	18	36
500	12	24	48
750	20	40	78
1000 or greater	29	56	109

TABLE 4.7-3 (Continued)

TABLE NOTATION

Note 1: The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of ~~unacceptable~~ ^{inoperable} snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inoperable. These categories may be examined separately or jointly. However, the licensee must make and document that decision before any inspection and shall use that decision as the basis upon which to determine the next inspection interval for that category.

Note 2: Interpolation between population or category sizes and the number of ~~unacceptable~~ ^{inoperable} snubbers is permissible. Use next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of ~~unacceptable~~ ^{inoperable} snubbers as determined by interpolation.

Note 3: If the number of ~~unacceptable~~ ^{inoperable} snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months.

Note 4: If the number of ~~unacceptable~~ ^{inoperable} snubbers is equal to or less than the number in Column B but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.

Note 5: If the number of ~~unacceptable~~ ^{inoperable} snubbers is equal to or greater than the number in Column C, the next inspection interval shall be ~~two-thirds~~ ^{inoperable} of the previous interval. However, if the number of ~~unacceptable~~ ^{inoperable} snubbers is less than the number in Column C but greater than the number in Column B, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of ~~unacceptable~~ ^{inoperable} snubbers found during the previous interval and the number in Column B to the difference in the numbers in Columns B and C.

Note 6: The provisions of Specification 4.0.2 are applicable for all inspection intervals up to and including 48 months.

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environment. The operation of this system and the resultant effects on offsite dosage calculations was assumed in the accident analyses.

3/4.7.8 SNUBBERS

All safety related 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 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.

INSERT B
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 ~~snubbers of each type 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.

INSERT C
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 (1) of a specific make or model, (2) of the same design, and (3) similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration. These characteristics of the snubber installation shall be evaluated to determine if further functional testing of similar snubber installations is warranted.

INSERT D
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.

To provide assurance of snubber functional reliability, a representative sample of the installed snubbers of each type* 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 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

*Small bore (<8") and large bore (>8") hydraulic snubbers are examples of different types of snubbers.

INSERT "B" (for BASES 3/4.7.8)

inoperable snubbers found during the previous inspection, the total population or category size, and the previous inspection interval.

Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, that decision must be made and documented before any inspection and that decision shall be used as the basis upon which to determine the next inspection interval for that category.

INSERT "C" (for BASES 3/4.7.8)

A snubber is considered inoperable if it fails to satisfy the acceptance criteria of the visual inspection.

INSERT "D" (for BASES 3/4.7.8)

Operation may continue indefinitely if an engineering review and evaluation can document within 72 hours that the equipment connected to the snubber can continue to perform its required function(s) with the snubber inoperable. If the review and evaluation can not justify that the supported equipment will perform its required function(s), the equipment must be declared inoperable and the applicable action requirements met.

The Specification allows inspection intervals to be compatible with a 24 month fuel cycle, up to and including an increase to every other refueling outage.

ATTACHMENT B

UNIT 2 REVISED
TECHNICAL SPECIFICATION
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PLANT SYSTEM

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

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