

**LIMITING CONDITION FOR OPERATION**

**3.6.4 SHOCK SUPPRESSORS (SNUBBERS)**

Applicability

Applies to the operational status of shock suppressors (snubbers).

Objective

To assure the capability of the snubbers to:

Prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient, and

Allow normal thermal motion during startup and shutdown.

**SURVEILLANCE REQUIREMENT**

**4.6.4 SHOCK SUPPRESSORS (SNUBBERS)**

Applicability

Applies to periodic inspection and testing requirements for shock suppressors (snubbers).

Objective

To assure the operability of the snubbers to perform their intended functions.

## LIMITING CONDITION FOR OPERATION

### Specification

- a. During all reactor operating conditions, except cold shutdown, snubbers shall be operable on those systems required to be operable during that particular operating condition except as noted in 3.6.4.b, c and d below.

Snubbers excluded from this inspection program are those installed on nonsafety-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.

- b. With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to the operable status or perform an engineering evaluation to determine that the components supported by the snubber(s) were not adversely affected by the inoperability of the snubber(s), i.e. the snubber(s) is (are) not required for system operability.
- c. If after 72 hours the actions as described in Section 3.6.4b have not been completed, the supported system shall be declared inoperable and the appropriate action statement for that system will be followed.

## SURVEILLANCE REQUIREMENT

### Specification

Each snubber shall be demonstrated operable by the performance of the following augmented inservice inspection and testing programs. Snubbers excluded from these programs are those installed on nonsafety-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.

- a. Visual Inspection

- (i) Visual Inspection Frequency

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table 4.6.4-1. The visual inspection interval for each type of snubber (snubbers of the same design and manufacturer, irrespective of capacity) shall be determined based upon the criteria provided in Table 4.6.4-1.

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d. If the actions described in 3.6.4.b or c resulted in replacement or restoration to the operable status of the affected snubber(s), perform an engineering evaluation to determine if the components supported by the snubber(s) were adversely affected by the inoperability of the snubber.

(ii) Visual Inspection Acceptance Criteria

Visual inspections shall verify that (1) the snubber has no visible indications of damage or impaired operability, (2) attachments to the foundation or supporting structure are functional, and (3) fasteners for the attachment of the snubber to the component and to the snubber anchorage are functional. Snubbers which appear inoperable as a result of visual inspections shall be classified as unacceptable and may be reclassified acceptable for the purpose of establishing the next visual inspection interval, provided that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers irrespective of type that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined operable per Specification 4.6.4.b. All snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable for determining the next inspection interval. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the action requirements of TS 3.6.4 shall be met.

TABLE 4.6.4-1

SNUBBER VISUAL INSPECTION INTERVAL

Population or Category (Notes 1 and 2)	NUMBER OF UNACCEPTABLE 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

- 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 snubbers found during that 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 shall be made and documented before any inspection and shall serve as the basis upon which the next inspection interval for that category is determined.
- Note 2: Interpolation between population or category sizes and the number of unacceptable snubbers is permissible. Use the next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of unacceptable snubbers as determined by interpolation.
- Note 3: If the number of unacceptable 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 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 snubbers is equal to or greater than the number in Column C, the next inspection interval shall be two-thirds of the previous interval. However, if the number of unacceptable 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 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 4.0.1 are applicable for all inspection intervals up to and including 48 months.