

DESCRIPTION AND SAFETY ANALYSIS
PROPOSED CHANGE NPF-10/15-352

This is a request to revise Technical Specification 3/4.7.6, "Snubbers."

Existing Specifications:

Unit 2: See Attachment "A"
Unit 3: See Attachment "B"

Proposed Specifications:

Unit 2: See Attachment "C"
Unit 3: See Attachment "D"

DESCRIPTION

All snubbers installed on safety related systems or on nonsafety related systems where failure of a snubber or the system could adversely impact a safety related system are to be visually inspected. The inspection schedule is described in Surveillance Requirement (SR) 4.7.6.b and the inspection criteria are provided in SR 4.7.6.c.

The following proposed changes to SRs 4.7.6.b and c. are the Generic Letter 90-09 "Alternative Requirements for Snubber Inspection Intervals and Corrective Actions" recommended changes with minor editorial clarifications as described below.

Snubber Visual Inspection Schedule

The proposed change will replace the existing SR 4.7.6.b snubber visual inspection schedule with the schedule from Generic Letter 90-09. This change will allow accessible and inaccessible snubbers to be either grouped together for visual inspections or inspected independently and generally increases the snubber visual inspection intervals so that visual inspections may be performed during refueling outages. The only editorial change from the recommended schedule description in Generic Letter 90-09 is replacement of "type" with "category" in the third sentence of SR 4.7.6.b to maintain consistency.

Snubber Visual Inspection Acceptance Criteria

Three changes to SR 4.7.6.c visual inspection acceptance criteria, based on the recommended changes in Generic Letter 90-09, are requested as follows:

1. Clarify that snubbers which appear INOPERABLE as a result of visual inspections shall be classified as INOPERABLE before permitting them to be reclassified as OPERABLE for establishing the next visual inspection interval.

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2. Clarify that all snubbers found connected to an inoperable common hydraulic fluid reservoir must be counted as INOPERABLE for determining the next inspection interval.
3. Clarify that a review and evaluation shall be performed and documented to justify continued operation with an inoperable snubber. However, if continued operation cannot be justified, the snubber shall be declared inoperable and the ACTION requirements shall be met.

Bases

The proposed change will revise TS 3/4.7.6 "Snubbers" Bases to be consistent with the SR changes.

Basis for and Acceptability of Request

In Generic Letter 90-09 the NRC recommended all the significant changes proposed by SCE and additional editorial changes are proposed for clarity and to maintain consistency with previous terminology.

The proposed SR 4.7.6.b changes base the visual inspection interval on the snubber population, previous inspection results, and the length of the previous inspection interval. The proposed SR 4.7.6.b changes will generally extend the snubber visual inspection intervals so that snubber visual inspections and corrective actions may be performed during refueling outages. Taking credit for the large snubber populations at San Onofre Units 2 and 3, the combination of functional testing with visual inspections will continue to provide a 95 percent confidence level that 90 percent to 100 percent of the snubbers will operate within the specified acceptance limits. This confidence level (reliability) is equivalent to that provided by the existing snubber inspection and functional testing requirements. There is no change in plant equipment, operation, or accident analysis assumptions. Therefore, there is no negative safety impact from this change. In addition, this new schedule will reduce future occupational radiation exposure, is highly cost effective, and allows resources to be better utilized. With implementation of this change, critical workers that would be otherwise employed in an excessive visual inspection program can be used on other projects having potentially more safety significance to plant operations. From this standpoint, implementation of this change represents an enhancement to plant operations.

DISCUSSION

SR 4.7.6.b Snubber Visual Inspection Schedule

The existing SR 4.7.6.b, requires the visual inspection schedule for snubbers on safety related (and associated) systems to be based on the number of INOPERABLE snubbers found during the previous inspection and the length of the previous inspection interval. The existing snubber visual inspection schedule considers only the absolute number of snubber failures, and does not consider the size of the Unit 2 or 3 snubber populations. The proposed snubber visual inspection schedule is based on the number of INOPERABLE snubbers found during

the previous inspection in proportion to the sizes of the various snubber populations or categories.

Based on the existing SR 4.7.6.b schedule, the maximum visual inspection interval between surveillances is normally 18 months \pm 25%. Using the recommended Generic Letter 90-09 Table 4.7-2, "Snubber Visual Inspection Interval," the snubber visual inspection intervals will generally be increased so that snubber visual inspections may be performed during refueling outages. The proposed visual inspection examination schedule specifies the number of INOPERABLE snubbers to be found during an inspection interval for various snubber populations which prescribe the length of the next visual inspection interval. Based on the proposed schedule, the snubber population, and the number of INOPERABLE snubbers for the corresponding snubber population, a visual inspection interval may be twice, remain the same as, or be reduced to two-thirds the previous inspection interval. For example, a previous visual inspection interval of 24 months will remain 24 months if the snubber population is 500 and the number of INOPERABLE snubbers is greater than 12 but not greater than 24. The nominal interval will not exceed 48 months, however, the proposed Visual Inspection Interval may vary a maximum of 25% to coincide with either a Unit 2 or 3 refueling outage.

Also, in accordance with Generic Letter 90-09, the proposed SR 4.7.6.b change allows snubbers to be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. SCE will make and document the decision to categorize snubbers as accessible or inaccessible before any inspection and shall use that decision and the results of the visual inspection to determine the next inspection interval.

SR 4.7.6.c Snubber Visual Inspection Acceptance Criteria

1. Initial Inoperable Snubber Classification

The second sentence in SR 4.7.6.c, "Snubbers which appear INOPERABLE as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next inspection interval ..." is revised to "Snubbers which appear INOPERABLE as a result of visual inspections shall be classified as INOPERABLE and may be reclassified OPERABLE for the purpose of establishing the next visual inspection interval"

This proposed change clarifies that a snubber which appears inoperable as a result of a visual inspection must first be classified as INOPERABLE before it may be evaluated and potentially be reclassified as OPERABLE for establishing the next visual inspection interval.

2. Snubbers Connected to an Inoperable Common Hydraulic Fluid Reservoir

The fourth sentence in SR 4.7.6.c is revised to clarify that all snubbers found connected to an INOPERABLE common hydraulic fluid reservoir shall be counted as INOPERABLE for determining the next inspection interval. This sentence clarifies that all snubbers

connected to an inoperable common hydraulic fluid reservoir shall be counted as inoperable for determining the next interval, whether the inoperability is from an uncovered fluid port or any other reason.

3. Use of Analysis to Continue Plant Operation With an Inoperable Snubber

The following sentences, which are consistent with Generic Letter 90-09, Enclosure B, Section 4.7.9.c, are added to clarify the potential use of a documented analysis to justify continued plant operation with an inoperable snubber:

"A review and evaluation shall be performed and documented to justify continued operation with an INOPERABLE snubber. If continued operation cannot be justified, the snubber shall be declared INOPERABLE and the ACTION requirements shall be met."

This clarification is needed because the existing ACTION statement for Technical Specification 3.7.6 does not identify what analysis alternative may be used instead of entering a system action statement if a snubber is found to be INOPERABLE. The existing ACTION statement is:

"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 4.7.6.g on the attached component or declare the attached system inoperable and follow the appropriate ACTION statement for that system."

Therefore, this change clarifies the main ACTION statement in Technical Specification 3.7.6 for OPERABILITY review and evaluation of snubbers by allowing for a determination that a system be OPERABLE with a snubber INOPERABLE. Continued plant operation with an INOPERABLE snubber would be justified only if the evaluation is based on NRC approved analysis methods and acceptance criteria with a result that safety requirements are not changed.

Bases

TS 3/4.7.6 "Snubbers" Bases Changes

1. Replace "are" with "may be" in the first sentence of the second paragraph. This sentence is revised to "For visual inspection snubbers may be categorized" This change makes the bases consistent with the revisions to SR 4.7.6.b which provide the option to categorize and examine snubbers separately or jointly.
2. Revise the second sentence in the third paragraph to "...based upon the number of INOPERABLE snubbers found during the previous inspection in proportion to the sizes of the various snubber populations or categories and the previous inspection interval as specified in NRC Generic Letter 90-09, "Alternative Requirements For Snubber Visual Inspection Intervals and Corrective Actions." This change clarifies the intent of this Technical Specification to take credit for the size of the snubber

populations or categories and not significantly reduce the snubber operability confidence levels.

3. Delete the following sentences which are superseded by the proposed SR 4.7.6.c visual inspection schedule:

Unit 2 Bases

"Amendment No. 85 allows a one time extension of the inspection period during Cycle 5 operation while the NRC develops generic guidance applicable to 24 month operating cycles."

Unit 3 Bases

"Amendment No. 64 allows a one time extension of the inspection period during Cycle 4 operation while the NRC develops generic guidance applicable to 24 month operating cycles."

4. Add the following sentence:

"If a review and evaluation of an INOPERABLE snubber is performed and documented to justify continued operation and provided that all design criteria are met with the INOPERABLE snubber, then the INOPERABLE snubber would not need to be restored or replaced as stated in TS 3/4.7.6 "ACTION."

Differences From Generic Letter 90-09

The above changes to TS 3/4.7.6 incorporate the specific recommendations of Generic Letter 90-09 with the following exceptions:

1. SR 4.7.6.b, "Visual Inspections", third sentence beginning "The visual inspection interval for each type of snubber"

"Category" will be used instead of "type" to be consistent with the use of "categorized" in the first sentence and "categories" in the second sentence of proposed SR 4.7.6.b. It is also SCE practice to use "categories" to refer to accessible or inaccessible snubbers for visual inspections and to use "type" when grouping snubbers by manufacturer, etc. for functional testing as defined in SR 4.7.6.a.

2. SR 4.7.6.c. Visual Inspection Acceptance Criteria.

The use of "OPERABLE" and "INOPERABLE" is being retained, instead of using "acceptable" and "unacceptable" as proposed in Generic Letter 90-09, to retain consistency with existing SCE terminology.

Other Considerations or Benefits Realized by the Proposed TS Change

- The cost of a plant shutdown to perform snubber visual inspections is significant in comparison to benefits from performing snubber visual inspections during refueling outages which are scheduled approximately

every 24 months. A shutdown to perform visual inspections would be several weeks long, including cooldown and heatup periods.

- An additional heatup/cooldown cycle would be avoided if the snubber visual inspections are performed during refueling outages.
- Performing visual inspections during a refueling outage allows for minimizing personnel radiation doses because inaccessible area radiation levels would be substantially lower, and the longer outage duration will allow better radiation protection planning and implementation.
- Any significant change in operating status increases the probability of unusual events, which are more likely to occur during transient operation than during full power steady state operation.

SAFETY ANALYSIS

The proposed change described above shall be deemed to involve a significant hazards consideration if there is a positive finding in any one of the following areas:

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

Snubbers are installed to maintain the structural integrity of systems and components which either mitigate the consequences or failure of which may initiate a previously analyzed accident. The proposed change revises the visual inspection schedule based on the number of INOPERABLE snubbers for various snubber populations found during the previous inspection interval and the length of the previous inspection interval and generally increases the length of the surveillance interval. Considering the large population of snubbers at San Onofre Units 2 and 3, consistent with Generic Letter 90-09, use of the proposed visual examination schedule will not significantly reduce the confidence level for snubber operability provided by the existing visual examination schedule. Visual inspections and functional testing will continue to provide a 95 percent confidence level that 90 to 100 percent of the snubbers operate within the specified acceptance limits. Changes to the visual inspection acceptance criteria are clarifications only and do not change the intended meaning of the criteria. Therefore, the proposed change will not significantly increase the probability or consequences of previously evaluated accidents.

2. Will operation of the facility in accordance with this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed Technical Specification change does not change the number, type, design, function, or remaining service life of snubbers in either Unit 2 or 3. The proposed change does not alter the configuration of the facility, plant operation, or accident analysis assumptions. The increase in the length of snubber visual inspection intervals and clarifications of existing visual inspection acceptance criteria have no effect on accidents. Changes to the visual inspection criteria are clarifications only and do not change the intended meaning of the criteria. The proposed TS change will maintain the snubber operability confidence level within Generic Letter 90-09 specified limits. Therefore, the proposed change does not create the possibility of a new or different kind of accident.

3. Will operation of the facility in accordance with this proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed change does not alter the configuration of the facility, plant operation, or accident analysis assumptions. Taking credit for the large number of snubbers at San Onofre Units 2 and 3, the proposed change will generally increase the snubber visual inspection intervals. However, the margin of safety will not be significantly reduced because the confidence level for snubber operability provided by the existing visual examination schedule will not be reduced significantly, and the confidence level will remain within Generic Letter 90-09 specified limits for snubber operability. Even though the intended meaning of the visual inspection criteria is not changed, the clarifications may decrease the likelihood of a misinterpretation of the criteria which would increase margins of safety. Therefore, operation of the facility in accordance with this proposed change will not involve a significant reduction in a margin of safety.

Safety and Significant Hazards Determination

Based on the above Safety analysis, it is concluded that: 1) the proposed change does not constitute a significant hazards consideration as defined by 10 CFR 50.92; 2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed change; and 3) this action will not result in a condition which significantly alters the impact of the station on the environment as described in the NRC Final Environmental Statement.