May 01, 1991

Docket Nos. 50-280
and 50-281

DISTRIBUTION
See attached sheet

Mr. W. L. Stewart
Senior Vice President - Nuclear
Virginia Electric and Power Company
5000 Dominion Blvd.
Glen Allen, Virginia 23060

Dear Mr. Stewart:

SUBJECT: SURRY UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: SNUBBER VISUAL INSPECTION FREQUENCY (TAC NOS. 79643 AND 79644)

The Commission has issued the enclosed Amendment No. 156 to Facility Operating License No. DPR-32 and Amendment No. 155 to Facility Operating License No. DPR-37 for the Surry Power Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TS) in response to your application transmitted by letter dated January 31, 1991.

These amendments provide a visual snubber inspection program consistent with the guidance of Generic Letter 90-09, "Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions."

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

(Original Signed By)

Bart C. Buckley, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 156 to DPR-32
2. Amendment No. 155 to DPR-37
3. Safety Evaluation

cc w/enclosures:
See next page

CP-1

| OFC | :LA:PD22 | :PM:PD22 | :EMEB:NRR | :D:PD22 | :OGC | : | : |
|---|---|---|---|---|---|---|---|
| NAME | :DMiller | :BBuckley:kdj | :JNorberg | :HBerkow | : SUttal | : | : |
| DATE | :4/19/91 | :4/19/91 | : /91 | : 4/30/91 | :4/24/91 | : | : |

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DATED: May 01, 1991

AMENDMENT NO. 156 TO FACILITY OPERATING LICENSE NO. DPR-32 - SURRY UNIT 1
AMENDMENT NO. 155 TO FACILITY OPERATING LICENSE NO. DPR-37 - SURRY UNIT 2

Docket File
NRC & Local PDRs
PDII-2 Reading
S. Varga, 14/E/4
G. Lainas, 14/H/3
H. Berkow
D. Miller
B. Buckley
OGC-WF
D. Hagan, 3302 MNBB
E. Jordan, 3302 MNBB
B. Grimes, 9/A/2
G. Hill (6), P-137
Wanda Jones, P-130A
C. Grimes, 11/F/23
J. Richardson, 7-D-26
J. Norberg, 7-D-2
ACRS (10)
GPA/PA
OC/LFMB
PD Plant-specific file [Gray File]
M. Sinkule, R-II
Others as required

cc: Plant Service list

Mr. W. L. Stewart
Virginia Electric and Power Company

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Board of Supervisors of Surry County
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Manager - Nuclear Licensing
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5000 Dominion Blvd.
Glen Allen, Virginia 23060

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

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-280

SURRY POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 156
License No. DPR-32

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

   A. The application for amendment by Virginia Electric and Power Company (the licensee) dated January 31, 1991, 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, the license 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-32 is hereby amended to read as follows:

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(B) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 156 , 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

Herbert N. Berkow

Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 01, 1991

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

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-281

SURRY POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 155
License No. DPR-37

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

   A. The application for amendment by Virginia Electric and Power Company (the licensee) dated January 31, 1991, 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, the license 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-37 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 155 , 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

Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 01, 1991

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 156 FACILITY OPERATING LICENSE NO. DPR-32

AMENDMENT NO. 155 FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NOS. 50-280 AND 50-281

Revise Appendix A as follows:

| Remove Pages | Insert Pages |
|---|---|
| TS 4.17-1 | TS 4.17-1 |
| TS 4.17-2 | TS 4.17-2 |
| TS 4.17-3 | TS 4.17-3 |
| TS 4.17-4 | TS 4.17-4 |
| TS 4.17-5 | TS 4.17-5 |
| TS 4.17-6 | TS 4.17-6 |
| TS 4.17-7 | TS 4-17-7 |
| TS 4.17-8 | TS 4-17-8 |
| TS 4.17-9 | TS 4.17-9 |

## 4.17 SHOCK SUPPRESSORS (SNUBBERS)

### Applicability

Applies to all hydraulic and mechanical shock suppressors (snubbers) which are required to protect the reactor coolant system and other safety-related systems. Snubbers excluded from this inspection 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.

### Objective

To specify the minimum frequency and type of surveillance to be applied to the hydraulic and mechanical snubbers required to protect the reactor coolant system and other safety-related systems.

### Specification

Each snubber shall be demonstrated operable by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.3. As used in this specification, "type of snubber" shall mean snubbers of the same design and manufacturer, irrespective of capacity.

A. Visual Inspections

1. 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 4.17-1. The visual inspection interval of each type of snubber shall be determined based upon the criteria provided in Table 4.17-1.

B. Visual Inspection Acceptance Criteria

1. Visual inspections shall verify that:

   a. the snubber has no visible indications of damage or impaired operability,

   b. attachments to the foundation or supporting structure are functional,

   c. fasteners for the attachment of the snubber to the component and to the snubber anchorage are functional, and

   d. 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.

2. 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:

   a. 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

   b. the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specification 4.17.D or E.

   When hydraulic snubbers which have uncovered fluid ports are tested for operability, the test shall be performed by starting with the piston at the as-found setting and extending the piston rod in the tension mode direction.

3. All snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable for determining the next inspection interval.

4. 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 Specification 3.20 shall be met.

C. Functional Tests

1. At least once per 18 months during shutdown, a representative sample of 10% of the total of each type of snubber used in the plant shall be functionally tested either in place or in a bench test.

2. The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity of snubbers. This representative sample shall not, to the extent practicable, include those snubbers tested in a previous representative sample.

3. At least 25% of the snubbers in the representative sample shall include snubbers from 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), and

   c. snubbers within 10 feet of the discharge from a safety relief valve.

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

5. 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.

6. For each snubber that does not meet the functional acceptance criteria of Specification 4.17.D or 4.17.E, an additional 10% of that type of snubber shall be functionally tested.

7. For snubbers of 50 kips and above that are extremely difficult to remove or in high radiation zones that fail the functional testing, an engineering evaluation is required to determine the failure mode. If the failure is determined to be non-generic, an additional 10% of that category will be tested during the next functional test period.

8. 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.

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* 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.

9. For the snubber(s) found inoperable, an engineering evaluation shall be performed on the components which are supported by 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

1. The hydraulic snubber functional test shall verify that:

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

   b. Snubber bleed, or release rate, where required, is within the specified range in compression and 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. Mechanical Snubbers Functional Test Acceptance Criteria

1. The mechanical snubbers functional test shall verify that:

   a. The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force. Drag force shall not have increased more than 50% since the last functional test.

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

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

F. Snubber Service Life Monitoring

1. 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 6.5.B.9.

2. Concurrent with the first inservice visual inspection and at least once per 18 months thereafter, the installation and maintenance records for each snubber 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.

Bases

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 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 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.

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. Functional testing is to be in accordance with ASME Section XI 1980 Ed., Subsection IWF. Observed failures of these sample snubbers shall require functional testing of additional units.

Hydraulic snubbers and mechanical snubbers may 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.

## TABLE 4.17-1
## 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 |
| 300 | 5 | 12 | 25 |
| 400 | 8 | 18 | 36 |
| 500 | 12 | 24 | 48 |
| 750 | 20 | 40 | 78 |
| 1000 or greater | 29 | 56 | 109 |

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 are categorized, based upon their accessibility during power operation, as accessible or inaccessible. 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 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 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 4.0.2 are applicable for all inspection intervals up to and including 48 months.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 156 TO FACILITY OPERATING LICENSE NO. DPR-32

AND AMENDMENT NO. 155TO FACILITY OPERATING LICENSE NO. DPR-37

VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-280 AND 50-281

## 1.0 INTRODUCTION

By letter dated January 31, 1991, the Virginia Electric and Power Company (the licensee) requested a revision to Technical Specifications (TS) Section 4.17 of Facility Operating License Nos. DPR-32 and DPR-37 for the Surry Power Station, Units 1 and 2, respectively. This proposed revision provides a visual inspection program for snubbers consistent with the guidance of Generic Letter 90-09, "Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions," dated December 11, 1990.

## 2.0 EVALUATION

The TS-required surveillance for safety-related snubbers consists of two parts: functional testing and visual inspection. Functional testing provides a 95% confidence level that more than 90% of the plant snubber population operates within the specified acceptance limits. One hundred percent of the snubbers are visually inspected; their intervals are determined solely by the number of inoperable snubbers discovered during the previous visual inspection, regardless of the size of the population. Visual inspections are scheduled on the assumption that refueling intervals will not exceed 18 months. As a result, plant personnel may be subjected to unnecessary radiological exposure in order to comply with the visual inspection requirements should the refueling interval exceed 18 months.

To alleviate this situation, the staff has developed an alternate schedule for visual inspection of snubbers which maintains the same 95% confidence level that the snubbers will function properly when required, yet permits licensees to perform visual inspections and corrective actions during plant outages. The alternate schedule is described in the attached Generic Letter 90-09.

The licensee proposes to adopt the alternate schedule for visual inspection for Surry, Units 1 and 2 and will revise its visual inspection procedure to include Table 4.7.2 of Generic Letter 90-09.

## 3.0 SUMMARY

The staff has reviewed the licensee's proposed revision to TS Section 4.17 and has found it to be consistent with guidance of Generic Letter 90-09. Therefore, we find the proposed revision to be acceptable.

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## 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Virginia State official was notified of the proposed issuance of the amendments. The State official had no comment.

## 5.0 ENVIRONMENTAL CONSIDERATION

These amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding (56 FR 6883). Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

## 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: H. Shaw

Date: May 01, 1991

Attachment: Generic Letter 90-09

ATTACHMENT

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

December 11, 1990

TO: ALL LIGHT-WATER REACTOR LICENSEES AND APPLICANTS

SUBJECT: ALTERNATIVE REQUIREMENTS FOR SNUBBER VISUAL INSPECTION INTERVALS AND CORRECTIVE ACTIONS (GENERIC LETTER 90-09)

Technical Specifications (TS) impose surveillance requirements for visual inspection and functional testing of all safety-related snubbers. A visual inspection is the observation of the condition of installed snubbers to identify those that are damaged, degraded, or inoperable as caused by physical means, leakage, corrosion, or environmental exposure. To verify that a snubber can operate within specific performance limits, the licensees perform functional testing that typically involves removing the snubber and testing it on a specially-designed test stand. Functional testing provides a 95 percent confidence level that 90 percent to 100 percent of the snubbers operate within the specified acceptance limits. The performance of visual examinations is a separate process that complements the functional testing program and provides additional confidence in snubber operability.

The TS specifies a schedule for snubber visual inspections that is based on the number of inoperable snubbers found during the previous visual inspection. The schedules for visual inspections and for the functional testing assume that refueling intervals will not exceed 18 months. Because the current schedule for snubber visual inspections is based only on the number of inoperable snubbers found during the previous visual inspection, irrespective of the size of the snubber population, licensees having a large number of snubbers find that the visual inspection schedule is excessively restrictive. Some licensees have spent a significant amount of resources and have subjected plant personnel to unnecessary radiological exposure to comply with the visual examination requirements.

To alleviate this situation, the staff has developed an alternate schedule for visual inspections that maintains the same confidence level as the existing schedule and generally will allow the licensee to perform visual inspections and corrective actions during plant outages. Because this line-item TS improvement will reduce future occupational radiation exposure and is highly cost effective, the alternative inspection schedule is consistent with the Commission's policy statement on TS Improvements.

The alternative inspection schedule is based on the number of unacceptable snubbers found during the previous inspection in proportion to the sizes of the various snubber populations or categories. A snubber is considered unacceptable if it fails the acceptance criteria of the visual inspection. The alternative inspection interval is based on a fuel cycle of up to 24 months and may

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be as long as two fuel cycles, or 48 months for plants with other fuel cycles, depending on the number of unacceptable snubbers found during the previous visual inspection.

Guidance on implementing the alternative TS requirements for visual inspection intervals is provided in Enclosures A and B. Licensees and applicants are encouraged to propose changes to their TS that are consistent with this guidance. The NRC project manager will expeditiously review conforming amendment requests for the facility. Questions on this matter should be addressed to the contact listed below or to the project manager.

This request is covered by Office of Management and Budget Clearance Number 3150-0011, which expires January 31, 1991. The estimated average number of burden hours is 40 person hours per licensee response, including searching data sources, gathering and analyzing the information, and writing the requested reports. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch, Division of Information Support Services, Office of Information and Resources Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; and to the Paperwork Reduction Project (3150-0011), Office of Management and Budget, Washington, DC 20503.

Sincerely,

James G. Partlow
Associate Director for Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

Contact: Jai Rajan (301) 492-0788

# ALTERNATIVE REQUIREMENTS FOR DETERMINING THE INTERVAL FOR THE VISUAL INSPECTION OF SNUBBERS

An alternate method for determining the next interval for the visual inspection of snubbers is provided based upon the number of unacceptable snubbers found during the previous inspection, the total population or category size for each snubber type, and the previous inspection interval. A snubber is considered unacceptable if it fails to satisfy the acceptance criteria of the visual inspection. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. 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.

If a licensee's review and evaluation can not justify continued operation with an unacceptable snubber, the licensee shall declare the snubber inoperable and shall meet the applicable action requirements. To determine the next surveillance interval, the licensee may reclassify an unacceptable snubber as acceptable if it can be demonstrated that the snubber is operable in its as-found condition by the performance of a functional test and if it satisfies the acceptance criteria for functional testing.

The next visual inspection interval may be twice, the same, or reduced by as much as two-thirds of the previous inspection interval. This interval depends on the number of unacceptable snubbers found in proportion to the size of the population or category for each type of snubber included in the previous inspection. Table 4.7-2 in Enclosure B replaces the existing TS requirements for determining the next visual inspection interval. Generally, the existing TS requirements establish inspection intervals of 18 months (the length of a nominal fuel cycle) or a fraction thereof based on the number of inoperable snubbers of each type for the previous inspection period.

The alternative provided herein allows inspection intervals to be compatible with a 24-month fuel cycle. Also, the interval may be increased to every other refueling outage for plants on a 24-month fuel cycle or up to 48 months for plants with other fuel cycles if few unacceptable snubbers were found from the previous inspection. Table 4.7-2 establishes three limits for determining the next visual inspection interval corresponding to the population or category size for a given type of snubber. The three limits are listed in Columns A, B, and C of Table 4.7-2 for representative sizes of snubber populations or categories. For a population or category that differs from the representative size provided, the values for the limits may be found by interpolation from the limits provided in Columns A, B, and C for determining the next inspection interval. Where the limit for unacceptable snubbers in Columns A, B, or C is determined by interpolation and includes a fractional value, the limit may be reduced to the next lower integer.

The limits in columns A, B, and C of Table 4.7-2 are applied as follows to determine the next inspection interval. If the number of unacceptable snubbers is less than or equal to the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months, excluding the TS provisions to extend surveillance intervals. If the number of unacceptable snubbers is greater than the number in Column A but less than or equal to

the number in Column B, the next inspection interval shall be the same as the previous interval. If the number of unacceptable snubbers is equal to or greater than the number in Column C, the next inspection interval shall be reduced to two-thirds of the previous interval. However, if the number of unacceptable snubbers is less than the number in Column C and greater than the number in Column B, the next inspection interval shall be reduced proportionally by a factor that is one-third of the ratio of the difference between the number of unacceptable snubbers and the number in Column B to the difference between the numbers of Columns B and C.

Enclosure B is a sample of the changes that should be proposed for TS that are based upon the format of the current Standard Technical Specifications (STS). For plants that have TS in a format different from the STS, proposed TS changes should be consistent with the changes provided in Enclosure B. The changes for this alternative are underlined, and Table 4.7-2 has been added.

# MODEL TECHNICAL SPECIFICATION CHANGES

## SURVEILLANCE REQUIREMENTS

4.7.9 Each snubber shall be demonstrated OPERABLE by the performance of the following augmented inservice inspection program in addition to the requirements of Specification 4.0.5.

a. Inspection Types
As used in this specification, "type of snubber" shall mean snubbers of the same design and manufacturer, irrespective of capacity.

b. Visual Inspections
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 4.7-2. The visual inspection interval for each type of snubber shall be determined based upon the criteria provided in Table 4.7-2 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 (*).

c. 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 4.7.9f. 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 shall be met.

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

TABLE 4.7-2
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 |
| 300 | 5 | 12 | 25 |
| 400 | 8 | 18 | 36 |
| 500 | 12 | 24 | 48 |
| 750 | 20 | 40 | 78 |
| 1000 or greater | 29 | 56 | 109 |

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, 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 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 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 that 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 4.0.2 are applicable for all inspection intervals up to and including 48 months.

LIST OF RECENTLY ISSUED GENERIC LETTERS

| Generic Letter No. | Subject | Date of Issuance | Issued To |
|---|---|---|---|
| 89-10 SUPP. 3 | CONSIDERATION OF THE RESULTS OF NRC-SPONSORED TESTS OF MOTOR-OPERATED VALVES | 10/25/90 | ALL LICENSEES OF OPERATING NUCLEAR POWER PLANTS AND HOLDERS OF CONSTRUCTION PERMITS FOR NUCLEAR POWER PLANTS |
| 90-08 | SIMULATION FACILITY EXEMPTIONS | 08/10/90 | ALL HOLDERS OF OPERATING LICENSES OR CONSTRUCTION PERMITS FOR NUCLEAR POWER REACTORS |
| 90-07 | OPERATOR LICENSING NATIONAL EXAMINATION SCHEDULE | 08/10/90 | ALL POWER REACTOR LICENSEES AND APPLICANTS FOR AN OPERATING LICENSE |
| 89-10 SUPP. 2 | AVAILABILITY OF PROGRAM DESCRIPTIONS | 08/03/90 | ALL LICENSEES OF OPERATING NPPs AND HOLDERS OF CPs FOR NPPs |
| 88-20 SUPP. 3 | COMPLETION OF CONTAINMENT PERFORMANCE IMPROVEMENT PROGRAM AND FORWARDING OF INSIGHTS FOR USE IN THE INDIVIDUAL PLANT EXAMINATION FOR SEVERE ACCIDENT VULNERABILITIES | 07/06/90 | ALL LICENSEES HOLDING OLs AND CPs FOR NPP FACILITIES EXCEPT LICENSEES FOR BWRs WITH MARK I CONTAINMENTS |
| 90-06 | RESOLUTION OF GI 70, "POWER-OPERATED RELIEF VALVE AND BLOCK VALVE RELIABILITY," AND GI 94, "ADDITIONAL LOW-TEMPERATURE OVERPRESSURE PROTECTION FOR LIGHT-WATER REACTORS," PURSUANT TO 10CFR50.54(f) | 06/28/90 | ALL PRESSURIZED WATER REACTOR LICENSEES AND CONSTRUCTION PERMIT HOLDERS |
| 90-05 | GUIDANCE FOR PERFORMING TEMPORARY NON-CODE REPAIR OF ASME CODE CLASS 1,2,&3 PIPING | 06/15/90 | ALL HOLDERS OF OPERATING LICENSES FOR NPPs |
| 89-10 SUPP. 1 | RESULTS OF THE PUBLIC WORKSHOP | 06/13/90 | ALL LICENSEES OF OPERATING NPPs AND HOLDERS OF CPs |