



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. 107  
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  - A. The application for amendment by Virginia Electric and Power Company (the licensee) dated August 9, 1985, as superseded December 20, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and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:

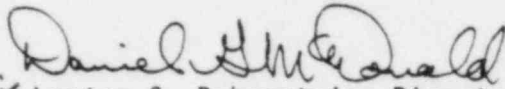
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(B) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 107, 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

*acting for*  
  
Lester S. Rubenstein, Director  
PWR Project Directorate #2  
Division of PWR Licensing-A  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 15, 1986



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. 107  
License No. DPR-37

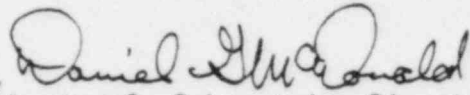
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Virginia Electric and Power Company (the licensee) dated August 9, 1985, as superseded December 20, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (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. 107, 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

*acting*  
*for*   
Lester S. Rubenstein, Director  
PWR Project Directorate #2  
Division of PWR Licensing-A  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 15, 1986

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 107 FACILITY OPERATING LICENSE NO. DPR-32

AMENDMENT NO. 107 FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NOS. 50-280 AND 50-281

Revise Appendix A as follows:

	<u>Remove Pages</u>		<u>Insert Pages</u>
TS	3.20-1	TS	3.20-1
	3.20-2		3.20-2
	4.17-1		4.17-1
	4.17-4		4.17-4
	4.17-5		4.17-5
	4.17-6		4.17-6
	4.17-10		4.17-10
	4.17-11		- - - -
	through		- - - -
	4.17-52		- - - -
	6.5-3		6.5-3

3.20 SHOCK SUPPRESSORS (SNUBBERS)Applicability

Applies to all shock suppressors (snubbers) which are required to protect the reactor coolant system and other safety-related systems. 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 effects on any safety-related system.

Objective

To define those limiting conditions for operation that are necessary to ensure that all snubbers required to protect the reactor coolant system, or any other safety-related system or component, are operable during reactor operation.

Specifications

- A. During all modes of operation except Cold Shutdown and Refueling, all snubbers required to protect the reactor coolant system and other safety related systems shall be operable except as noted in 3.20.B and 3.20.C below.
- B. If any snubber required to protect the reactor coolant system and other safety-related systems is found to be inoperable, it must be repaired and made operable, or otherwise replaced with one which is operable within 72 hours.
- C. If the requirements of Specification B cannot be met, an orderly shutdown shall be initiated, and the reactor shall be in the hot shutdown condition within 36 hours.

- D. If a snubber is determined to be inoperable while the reactor is in the shutdown or refueling mode, the snubber shall be made operable or replaced prior to reactor startup.

#### Basis

Snubbers are designed to prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient while allowing normal thermal motion during startup and shutdown. The consequence of an inoperable snubber is an increase in the probability of structural damage to piping as a result of a seismic or other event initiating dynamic loads. It is therefore required that all snubbers required to protect the primary coolant system, or any other safety related system or component, be operable during reactor operation.

Because snubber protection is required only during low probability events, a period of 72 hours is allowed for repairs or replacement. In case a shutdown is required, the allowance of 36 hours to reach a hot shutdown condition will permit an orderly shutdown consistent with standard operating procedures. Since plant startup should not commence with knowingly defective safety related equipment, Specification 3.20.D prohibits startup with inoperable snubbers.

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.

A. Visual Inspections

1. 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 required to protect the reactor coolant system and other safety-related systems. 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  $\pm$  25% from the date of the first inspection. Otherwise, subsequent visual inspections shall be performed in accordance with the following schedule:



- 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.

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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 subsequent date.

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.
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 design 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

All table pages are deleted 4.17-10 through 4.17-52.

9. Records of the service lives of all hydraulic and mechanical snubbers on safety-related systems, including the date at which the service life commences and associated installation and maintenance records.
10. Records of the annual audit of the Station Emergency Plan and implementing procedures.
11. Records of the annual audit of the Station Security Plan and implementing procedures.