February 1, 1985

Docket No. 50-281

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Mr. W. L. Stewart
Vice President - Nuclear Operations
Virginia Electric and Power Company
Post Office Box 26666
Richmond, Virginia 23261

Dear Mr. Stewart:

The Commission has issued the enclosed Amendment No.101 to Facility Operating License No. DPR-37 for the Surry Power Station, Unit No. 2. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated January 4, 1985, as supplement January 9 and January 28, 1985.

The amendment revises Technical Specification 4.17.A to extend the snubber inspection interval from 62 days ±25% until the 1985 refueling outage.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular monthly Federal Register notice.

Sincerely,

/s/JDNeighbors

Joseph D. Neighbors, Project Manager
Operating Reactors Branch #1
Division of Licensing

Enclosures:
1. Amendment No.101 to DPR-37
2. Safety Evaluation

cc: w/enclosures
See next page

ORB#1:DL	ORB#1:DL	ORB#1:DL	BC-ORB#1:DL	OELD	AD:OR:DL
CParrish	KJohnston;ps	JDNeighbors	SVarga	J.GRAY	GLainas
1/28/85	1/28/85	1/28/85	1/29/85	1/29/85	1/31/85

with noted additions to SER pp 3&4

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JPKnight
1/29/85

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

Surry Power Station
Units 1 and 2

cc: Mr. Michael W. Maupin
Hunton and Williams
Post Office Box 1535
Richmond, Virginia 23213

Mr. Robert F. Saunders, Manager
Post Office Box 315
Surry, Virginia 23883

Donald J. Burke, Resident Inspector
Surry Power Station
U.S. Nuclear Regulatory Commission
Post Office Box 166, Route 1
Surry, Virginia 23883

Mr. Sherlock Holmes, Chairman
Board of Supervisors of Surry County
Surry County Courthouse
Surry, Virginia 23683

W. T. Lough
Virginia Corporation Commission
Division of Energy Regulation
Post Office Box 1197
Richmond, Virginia 23209

Regional Radiation Representative
EPA Region III
Curtis Building - 6th Floor
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

Mr. J. H. Ferguson
Executive Vice President - Power
Virginia Electric and Power Company
Post Office Box 26666
Richmond, Virginia 23261

James P. O'Reilly
Regional Administrator - Region II
U.S. Nuclear Regulatory Commission
Suite 2900
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

James B. Kenley, M.D., Commissioner
Department of Health
109 Governor Street
Richmond, Virginia 23219

Attorney General
1101 East Broad Street
Richmond, Virginia 05602

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. 101
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 4, 1985, as supplemented January 9 and January 28, 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:

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(B) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No.101 , 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

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 1, 1985

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 101 FACILITY OPERATING LICENSE NO. DPR-37

DOCKET NO. 50-281

Revise Appendix A as follows:

Remove Page	Insert Page
4.17-2	4.17-2

No. Inoperable Snubbers per Inspection Period	Subsequent Visual Inspection Period*
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3,4	124 days ± 25%
5,6,7	62 days ± 25% #
8 or more	31 days ± 25%

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

B. Visual Inspection Acceptance Criteria

1. Visual inspections shall verify:

   a. That there are no visible indications of damage or impaired operability,

   b. Attachments to the foundation or supporting structure are secure, and

   c. 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.

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* The inspection interval shall not be lengthened more than one step at a time.

The current inspection period for Unit 2 may be extended to the 1985 refueling outage.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 101 TO FACILITY OPERATING LICENSE NO. DPR-37

VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION, UNIT NO. 2

DOCKET NO. 50-281

Introduction

By letter dated January 4, 1985, as supplemented January 9 and January 28, 1985, Virginia Electric and Power Company (the licensee) submitted an application for a license amendment consisting of a proposed change to the Technical Specifications for Surry Power Station, Unit No. 2. This proposed Technical Specification would permit the licensee to perform the next visual inspection on inaccessible safety related snubbers during the upcoming refueling outage (on or about March 22, 1985) instead of on the required date of February 1, 1985.

Discussion

Surry Unit 2 performed a visual inspection of its safety related snubbers during the period of November 9 through November 17, 1984. Seven snubbers in the inaccessible group were found with low hydraulic fluid level in their reservoirs. The Technical Specifications require that another visual inspection on inaccessible snubbers be conducted on February 1, 1985 if all seven snubbers were found to be inoperable.

Surry Units 1 and 2 were both upgrading their snubbers by replacing seals on all safety related snubbers. Unit 1 has completed its program, and the latest inspection and testing showed remarkable improvement over previous records. Unit 2 had not completed its program at the time of last inspection. Four of the seven snubbers in question are located on the pressurizer, and have a common reservoir. They were declared inoperable because a leaking seal in one of the four snubbers emptied the common reservoir. The other three snubbers in question are attached to the main steam line. Their remote reservoirs were found to be empty due to a leak in the fitting at the valve block in one and leaks in the fittings at reservoirs for the other two. However, tubings below these two leaking fittings were found to be full of fluid. Surry Unit 2 did not perform functional testing on these seven snubbers in the "as found" condition before declaring them inoperable, but the post mortem examination confirmed that none of the control valve blocks of the seven snubbers was degraded.

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Technical Specifications permit functional testing on questionable snubbers in the "as found" condition to determine whether they are still functionable unless the fluid level is below the port of the valves. This is because working control valves and ample fluid will make snubbers operable. Of the seven snubbers, two probably should be declared inoperable. These would include the one on the main steam line on which leakage developed in the fitting at the valve block, and one of the four snubbers with common reservoir which had a seal leakage that caused the empty reservoir. The other five should pass the above mentioned functional test and be declared as operable because they all had working control valves and adequate fluid reserves in the tubing between reservoirs and snubbers. These would include the second and third snubbers on the main steam line and the other three pressurizer snubbers on the common reservoir. Since the staff believes that these five snubbers would have passed the "as found" functional testing, the required visual inspection for the inaccessible snubbers would have been substantially later than February 1, 1985.

The licensee requested this amendment because it does not want to perform redundant work with unnecessary radioactive exposures to its workers and because it will perform a complete visual inspection on all safety related snubbers during the coming refueling outage. The outage is scheduled for March 22, 1985. As an interim measure, the licensee committed to conduct a partial visual inspection on a substantial portion of the inaccessible snubbers. This would minimize the radioactive exposures to its workers. This partial visual inspection has been performed with no inoperable snubbers found.

Surry Unit 2 completed its upgrading program during the November 1984 outage. All safety related snubbers were re-sealed including the four pressurizer snubbers with common reservoir. In addition, leaking fittings on the three main steam line snubbers were replaced. Since Surry Unit 2 has effectively removed the generic concern of seal degradation and the isolated concern of leaking fittings, the repetition of these incidents within a short time is highly unlikely. The interim measure of a partial visual inspection has demonstrated the effectiveness of the upgrading program.

The January 28, 1985 submittal provided additional supporting information. However, this amendment would have been granted without this letter. Therefore, this letter does not change our conclusion in this regard.

The staff concludes, based on the above, that the proposed amendment to delay the full visual inspection to the coming refueling outage is acceptable.

Emergency Circumstances

The NRC Project Manager was informed on January 3, 1985, of the need for the amendment and the application was submitted by letter dated January 4, 1985

and supplemented by letters dated January 9 and January 28, 1985. We have reviewed the facts concerning this request. The facts were that the licensee's focus had been on the detailed examination of the snubber's failure mechanism and its implications and on alternative methodologies and analyses, rather than on scheduling implications. Also, these efforts were hampered by the unavailability of key personnel during the holiday season. We conclude that the licensee has made a timely submittal, that reactor shutdown would be required without NRC action, that action by the licensee could not preclude this situation without reactor shut down, and that the licensee did not purposely create this situation in order to avoid the normal notice period for license amendments.

No Significant Hazards Consideration Determination

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards considerations if operation of the facility in accordance with the amendment would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

(2) Create the possibility of a new or different kind of accident from any accident perviously evaluated; or

(3) Involve a significant reduction in a margin of safety.

The amendment will modify the Technical Specification 4.17.A on a one-time basis to extend the snubber (shock suppressors) inspection to the 1985 refueling outage which is scheduled to begin on or about March 22, 1985.

Based on inspection results during the last visual snubber inspection, the next inspection interval was determined to be 62 days ± 25 percent, or no later than February 1, 1985. Since visual and functional testing of the snubbers will be performed during the refueling outage, the licensee states that the inspection now would result in unnecessary personnel exposure.

The licensee has performed a visual inspection of the oil reservoir level of a significant number of snubbers which can be inspected practicably (oil loss is the predominant failure mode of these snubbers). Since a large sample of the snubbers has been inspected with acceptable results, the possibility of undiscovered failure is low and the function of the total population of snubbers is reasonably assured. Thus, the reduction in margin of safety is considered to be insignificant.

The Commission has considered licensee's proposed change in light of the above three criteria. First, while there may be some small increase in the probability of snubber failure during the extended surveillance interval, the Commission concludes because of the above compensatory inspection measures, this increase is not significant. The consequences of previously evaluated accidents are unaffected by the proposed extension of the inspection interval. Second, since accidents which might be caused by the

possible failure of one or more snubbers during the extended inspection interval are the same as those previously evaluated, the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. Third, since all snubbers were examined in November 1984, all failed snubbers were repaired, and the licensee has inspected a significant number of snubbers during the current interval, the reduction in a safety margin is considered to be insignificant. On these grounds, the proposed amendment extending the snubber inspection interval does not involve significant hazards considerations.

State Consultation

In accordance with the Commission's regulation, consultation was held with the State of Virginia by telephone on January 11, 1985. No comments were made by the State on this amendment.

Environmental Consideration

This amendment involves a change in an inspection or surveillance requirement. The staff has determined that the amendment involves 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 further determined that this amendment involves no significant hazards consideration. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 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 this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) this amendment will not, (a) significantly increase the probability or consequences of accident previously evaluated, (b) create the possibility of a new or different accident from any previously evaluated or (c) significantly reduce a margin of safety, and, therefore, this amendment does not involve significant hazards considerations; (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: February 1, 1985

Principal Contributors:

Horace Shaw
Don Neighbors
Ken Johnston