

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

April 26, 1994

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D. C. 20555

Serial No. 94-223  
NL&P/GSS R1  
Docket Nos. 50-338  
50-339  
50-280  
50-281  
License Nos. NPF-4  
NPF-7  
DPR-32  
DPR-37

Gentlemen:

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**NORTH ANNA POWER STATION UNITS 1 AND 2**  
**SURRY POWER STATION UNITS 1 AND 2**  
**SUBMITTAL OF IST RELIEF REQUESTS**

Pursuant to 10 CFR 50.55a(f)(5), Virginia Electric and Power Company hereby requests relief from the Inservice Testing requirements of Section XI, 1986 Edition, paragraph IWV-3427(a) for the North Anna Power Station and of Section XI, 1989 Edition, OM Part 10, paragraph 4.2.2.3(f) for the Surry Power Station. These paragraphs state that for valves with leakage rates exceeding the values specified by the Owner, the valves shall be replaced or repaired. Relief is requested to provide additional flexibility in returning certain isolation valves to service following leak testing. The basis for each relief request is provided in the Attachments of this letter.

The relief requests pertain to the system of isolation valves that prevent leakage of contaminated containment sump water to the Refueling Water Storage Tanks (RWST) from the discharge side of the low head safety injection pumps during recirculation mode transfer phase of safety injection. Relief requests V-75 (North Anna Unit 1), V-76 (North Anna Unit 2), V-52 (Surry Unit 1), and V-52 (Surry Unit 2) state that in addition to replacement or repair as corrective actions, an evaluation can be performed. The evaluation is to demonstrate that even if a valve has exceeded its permissible leakage rate, the overall leakage rate to the RWST will be maintained below the overall allowable RWST leakage rate. Therefore, no repair or replacement is necessary if the evaluation is performed and the overall allowable leakage is maintained.

These relief requests are similar to the relief requests that have been submitted for the containment system isolation valves at the North Anna and Surry Power Stations.

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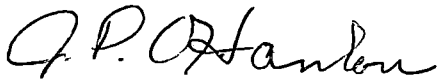
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Relief requests V-69 (North Anna Unit 1) and V-70 (North Anna Unit 2) allow for the use of an evaluation in addition to replacement or repair for the containment system isolation valves and were approved for use by the NRC Safety Evaluation dated September 17, 1993 (TAC Nos. M86645 and M86646). Relief requests V-51 (Surry Unit 1) and V-51 (Surry Unit 2) were submitted for the Surry containment system isolation valves by letter dated October 19, 1993 as part of the Third Ten Year IST Program update.

These relief requests have been reviewed by the Station Nuclear Safety and Operating Committees.

If you have questions regarding this information, please contact us.

Very truly yours,



for W. L. Stewart  
Senior Vice President - Nuclear

**Attachments**

1. North Anna Units 1 and 2 Relief Requests
2. Surry Units 1 and 2 Relief Requests

cc: U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, N. W.  
Suite 2900  
Atlanta, Georgia 30323

Mr. R. D. McWhorter  
NRC Senior Resident Inspector  
North Anna Power Station

Mr. M. W. Branch  
NRC Senior Resident Inspector  
Surry Power Station

**Attachment 1**

**North Anna Power Station Units 1 and 2  
IST Relief Requests**

NORTH ANNA UNIT 1

RELIEF REQUEST V-75

I. IDENTIFICATION OF COMPONENTS

System : Chemical and Volume Control and  
Safety Injection

Valve(s): 1-CH-MOV-1115B      1-SI-MOV-1885A  
          1-CH-MOV-1115D      1-SI-MOV-1885B  
          1-SI-47                1-SI-MOV-1885C  
                                  1-SI-MOV-1885D

Class : 2

II. IMPRACTICAL CODE REQUIREMENTS

IWV-3427 (a) - Valves with leakage rates exceeding either the values specified by the Owner or those rates given in IWV-3426 shall be replaced or repaired.

III. BASIS FOR RELIEF

Valves 1-CH-MOV-1115B and D, and 1-SI-47 are in the supply line to the charging pumps from the RWST. Valves 1-SI-MOV-1885A, B, C and D are on test lines that run from the discharge of the low head SI pumps to the RWST. During recirculation mode transfer, the RWST is isolated and the low head SI pumps recirculate highly contaminated water from the containment sump to the reactor vessel.

The RWST isolation valves work as a system of valves to protect the RWST from the contaminated sump water. Permissible valve leakage rates are based on each valve's possible contribution to the total allowable leakage rate to the RWST. When the leakages from each valve have been measured and summed, an individual valve's permissible leakage rate may have been exceeded but the overall allowable leakage to the RWST may not have been exceeded. In these cases, a repair or replacement may not be necessary because the system of isolation valves has been verified to be performing adequately.

IV. ALTERNATE TESTING

In addition to replacement or repair as corrective actions, an evaluation can be performed which demonstrates that even if a valve has exceeded its permissible leakage rate, the overall leakage rate to the RWST will be maintained below the overall allowable RWST leakage rate. No repair or replacement is necessary if the evaluation is performed.

NORTH ANNA UNIT 2

RELIEF REQUEST V-76

I. IDENTIFICATION OF COMPONENTS

System : Chemical and Volume Control and  
Safety Injection

Valve(s): 2-CH-MOV-2115B            2-SI-MOV-2885A  
          2-CH-MOV-2115D            2-SI-MOV-2885B  
          2-SI-18                    2-SI-MOV-2885C  
                                      2-SI-MOV-2885D

Class : 2

II. IMPRACTICAL CODE REQUIREMENTS

IWV-3427 (a) - Valves with leakage rates exceeding either the values specified by the Owner or those rates given in IWV-3426 shall be replaced or repaired.

III. BASIS FOR RELIEF

Valves 2-CH-MOV-2115B and D, and 2-SI-18 are in the supply line to the charging pumps from the RWST. Valves 2-SI-MOV-2885A, B, C and D are on test lines that run from the discharge of the low head SI pumps to the RWST. During recirculation mode transfer, the RWST is isolated and the low head SI pumps recirculate highly contaminated water from the containment sump to the reactor vessel.

The RWST isolation valves work as a system of valves to protect the RWST from the contaminated sump water. Permissible valve leakage rates are based on each valve's possible contribution to the total allowable leakage rate to the RWST. When the leakages from each valve have been measured and summed, an individual valve's permissible leakage rate may have been exceeded but the overall allowable leakage to the RWST may not have been exceeded. In these cases, a repair or replacement may not be necessary because the system of isolation valves has been verified to be performing adequately.

IV. ALTERNATE TESTING

In addition to replacement or repair as corrective actions, an evaluation can be performed which demonstrates that even if a valve has exceeded its permissible leakage rate, the overall leakage rate to the RWST will be maintained below the overall allowable RWST leakage rate. No repair or replacement is necessary if the evaluation is performed.

**Attachment 2**

**Surry Power Station Units 1 and 2  
IST Relief Requests**

SURRY UNIT 1

RELIEF REQUEST V-52

System : Chemical and Volume Control and  
Safety Injection

Valve(s): 1-CH-LCV-1115B      1-SI-MOV-1885A  
          1-CH-LCV-1115D      1-SI-MOV-1885B  
          1-SI-25                1-SI-MOV-1885C  
                                  1-SI-MOV-1885D

Category: A and A/C

Class : 2

Function: RWST Isolation Valves

OM Part 10 Code Requirements  
For Which Relief Is Requested

OM Part 10, Section 4.2.2.3(f) - Valves or valve combinations with leakage rates exceeding the values specified by the Owner in (e) above shall be declared inoperable and be either repaired or replaced.

Basis For Request

Valves 1-CH-LCV-1115B and D, and 1-SI-25 are in the supply line to the charging pumps from the RWST. Valves 1-SI-MOV-1885A, B, C and D are on test lines that run from the discharge of the low head SI pumps to the RWST. During recirculation mode transfer, the RWST is isolated and the low head SI pumps recirculate highly contaminated water from the containment sump to the reactor vessel.

The RWST isolation valves work as a system of valves to protect the RWST from the contaminated sump water. Permissible valve leakage rates are based on each valve's possible contribution to the total allowable leakage rate to the RWST. When the leakages from each valve have been measured and summed, an individual valve's permissible leakage rate may have been exceeded but the overall allowable leakage to the RWST may not have been exceeded. In these cases, a repair or replacement may not be necessary because the system of isolation valves has been verified to be performing adequately.

SURRY UNIT 1

RELIEF REQUEST V-52 (Cont.)

Alternate Testing Proposed

In addition to repair or replacement as corrective actions, an evaluation can be performed which demonstrates that even if a valve has exceeded its permissible leakage rate, the overall leakage rate to the RWST will be maintained below the overall allowable RWST leakage rate. No repair or replacement is necessary if the evaluation is performed.



SURRY UNIT 2

RELIEF REQUEST V-52

System : Chemical and Volume Control and  
Safety Injection

Valve(s): 2-CH-LCV-2115B      2-SI-MOV-2885A  
          2-CH-LCV-2115D      2-SI-MOV-2885B  
          2-SI-25                2-SI-MOV-2885C  
                                  2-SI-MOV-2885D

Category: A and A/C

Class : 2

Function: RWST Isolation Valves

OM Part 10 Code Requirements  
For Which Relief Is Requested

OM Part 10, Section 4.2.2.3(f) - Valves or valve combinations with leakage rates exceeding the values specified by the Owner in (e) above shall be declared inoperable and be either repaired or replaced.

Basis For Request

Valves 2-CH-LCV-2115B and D, and 2-SI-25 are in the supply line to the charging pumps from the RWST. Valves 2-SI-MOV-2885A, B, C and D are on test lines that run from the discharge of the low head SI pumps to the RWST. During recirculation mode transfer, the RWST is isolated and the low head SI pumps recirculate highly contaminated water from the containment sump to the reactor vessel.

The RWST isolation valves work as a system of valves to protect the RWST from the contaminated sump water. Permissible valve leakage rates are based on each valve's possible contribution to the total allowable leakage rate to the RWST. When the leakages from each valve have been measured and summed, an individual valve's permissible leakage rate may have been exceeded but the overall allowable leakage to the RWST may not have been exceeded. In these cases, a repair or replacement may not be necessary because the system of isolation valves has been verified to be performing adequately.

SURRY UNIT 2

RELIEF REQUEST V-52 (Cont.)

Alternate Testing Proposed

In addition to repair or replacement as corrective actions, an evaluation can be performed which demonstrates that even if a valve has exceeded its permissible leakage rate, the overall leakage rate to the RWST will be maintained below the overall allowable RWST leakage rate. No repair or replacement is necessary if the evaluation is performed.