

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

December 10, 1993

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Serial No. 93-769
NL&P/ETS
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 and 2
PROPOSED TECHNICAL SPECIFICATIONS CHANGES
AUXILIARY FEEDWATER SYSTEM TESTING

Pursuant to 10 CFR 50.90, the Virginia Electric and Power Company requests amendments, in the form of changes to the Technical Specifications, to Facility Operating License Nos. NPF-4 and NPF-7 for North Anna Power Station Units 1 and 2, respectively. The proposed changes modify the surveillance frequency of the Auxiliary Feedwater System pumps from monthly to quarterly in accordance with the guidance provided in Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirement for Testing During Power Operation," dated September 27, 1993.

A discussion of the proposed Technical Specifications changes is provided in Attachment 1. The proposed Technical Specifications changes are provided in Attachment 2. It has been determined that the proposed Technical Specifications changes do not involve an unreviewed safety question as defined in 10 CFR 50.59 or a significant hazards consideration as defined in 10 CFR 50.92. The basis for our determination that these changes do not involve a significant hazards consideration is provided in Attachment 3. The proposed Technical Specifications changes have been reviewed and approved by the Station Nuclear Safety and Operating Committee and the Management Safety Review Committee.

Should you have any questions or require additional information, please contact us.

Very truly yours,



W. L. Stewart
Senior Vice President - Nuclear

Attachments

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

Commissioner
Department of Health
Room 400
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Richmond, Virginia 23219

COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by J. P. O'Hanlon, who is Vice President - Nuclear Operations, for W. L. Stewart who is Senior Vice President - Nuclear, of Virginia Electric and Power Company. He is duly authorized to execute and file the foregoing document in behalf of that Company, and the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 10TH day of December 1993.

My Commission Expires: May 31, 1994.

Vicki L. Hall
Notary Public

(SEAL)

Attachment 1
Discussion of Changes

Discussion of Changes

Introduction

The NRC has completed a comprehensive examination of surveillance requirements in technical specifications that require testing at power. The evaluation is documented in NUREG-1366, "Improvements to Technical Specification Surveillance Requirements," dated December 1992. The NRC staff found, that while the majority of testing at power is important, safety can be improved, equipment degradation decreased, and an unnecessary burden on personnel resources eliminated by reducing the amount of testing at power that is required by technical specifications. Based on the results of the evaluations documented in NUREG 1366, the NRC issued Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," dated September 27, 1993.

The Auxiliary Feedwater System supplies water to the steam generators to remove decay heat from the Reactor Coolant System. To ensure operability of the Auxiliary Feedwater System, the pumps are currently tested on a monthly basis as required by Technical Specifications. Consistent with Generic Letter 93-05, Item 9.1 and NUREG-1366, we are requesting a change to the surveillance testing frequency for the Auxiliary Feedwater Pumps from monthly to quarterly on a staggered test basis.

Background

The Auxiliary Feedwater System consists of three separate and independent pumps with dedicated flow paths to the three steam generators. Two of these auxiliary feedwater pumps are motor driven and power is supplied to the motors by the emergency busses. The third auxiliary feedwater pump is a steam driven pump with the steam supplied by the steam generators.

In the past, the NRC has required monthly testing of the auxiliary feedwater pumps. However, as specified in NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements" of December 1992 and NRC Generic Letter 93-05 dated September 27, 1993, operating and testing experience has indicated that the monthly testing requirement of the auxiliary feedwater pumps is not necessary to adequately ensure that the auxiliary feedwater pumps will perform their intended function. This

amendment request will require the auxiliary feedwater pumps be tested quarterly on a staggered basis. This new testing frequency should reduce the Auxiliary Feedwater System unavailability resulting from failures and equipment degradation and result in increased system reliability. The acceptance criteria for operability of the auxiliary feedwater pumps are consistent with ASME Section XI requirements.

Specific Changes

This Technical Specification change applies to both Unit 1 and Unit 2. Surveillance Requirement (SR) 4.7.1.2 is being modified as follows:

- SR 4.7.1.2.a is changed to only include valve testing and will read:

4.7.1.2.a.1 "At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position."
- SR 4.7.1.2.b is changed to incorporate the pump testing and will read:

4.7.1.2.b.1 "At least once per 92 days on a STAGGERED TEST BASIS by verifying that each pump develops adequate discharge pressure and flow. The acceptance criterion shall be consistent with Specification 4.0.5. The provisions of Specification 4.0.4 are not applicable to steam turbine driven pump testing."
- Previous SR 4.7.1.2.b is renumbered as 4.7.1.2.c.
- Previous SR 4.7.1.2.c is renumbered as 4.7.1.2.d.

Safety Significance

The proposed change to the surveillance requirements for the Auxiliary Feedwater System are consistent with the intent of Generic Letter 93-05, "Line-Item Technical Specifications Improvement to Reduce Surveillance Requirements for Testing During Power Operation," dated September 27, 1993. The proposed change will require auxiliary feedwater pumps to be tested quarterly on a staggered basis.

Changing the test frequency of the Auxiliary Feedwater System pumps does not affect the probability of occurrence or the consequences of the accidents identified in the UFSAR. No new accident precursors are being generated by the proposed surveillance requirement. Further, quarterly testing and ASME Section XI acceptance criteria for the Auxiliary Feedwater System pumps provides assurance that the system is capable of performing its intended safety function. Therefore, the consequences of a postulated accident are not increased by this change in surveillance requirements for the Auxiliary Feedwater System pumps.

The reduced testing frequency of the Auxiliary Feedwater System pumps will not significantly increase the probability of a malfunction of a pump to perform its intended safety function. This reduction in test frequency of the Auxiliary Feedwater Pumps at power has been examined and accepted by the NRC staff in Generic Letter 93-05, Item 9.1. The staff found that while the majority of the testing at power is important, safety can be improved, equipment degradation decreased, and an unnecessary burden on personnel resources eliminated by reducing the amount of testing at power that is required by technical specifications.

Testing of the Auxiliary Feedwater System pumps will continue to be performed through the full-flow test lines. The pumps will be tested quarterly on a staggered test basis instead of monthly. This change in the surveillance requirements do not affect plant or Auxiliary Feedwater System operations. Therefore, no new accident precursors are being generated by the proposed surveillance changes for the Auxiliary Feedwater System.

The Technical Specifications operability requirements for the Auxiliary Feedwater System are not being changed. The quarterly testing of the pumps is adequate to ensure that the Auxiliary Feedwater System will be capable of performing its intended function. Therefore, the change in test frequency for the Auxiliary Feedwater System pumps does not reduce the margin of safety as described in the Technical Specifications.

Attachment 2

Technical Specifications Changes