

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

October 28, 1999

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

Serial No. 99-547
NL&OS/GSS/ETS R0
Docket Nos. 50-338/339
License Nos. NPF-4/7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
TECHNICAL SPECIFICATION BASES CHANGE
CORRECTION TO MAIN STEAM SAFETY VALVE CODE EDITION

Virginia Electric and Power Company has revised the Bases Section 3/4.7.1.1, "Safety Valves" to reflect that the design capacity of the Main Steam Safety Valves is based upon the requirements of Section III of the ASME Boiler and Pressure Vessel Code, 1968 Edition with Addenda through Winter 1970. The Bases discussion previously included reference to the 1971 Edition of the ASME code. We are providing these Technical Specification Bases changes for your information.

The Technical Specifications Bases changes have been reviewed and approved by the Station Nuclear Safety and Operating Committee and the Management Safety Review Committee. It has been determined that these changes do not involve an unreviewed safety question as defined in 10 CFR 50.59. A discussion of the changes and the Technical Specifications Bases changes are provided in Attachments 1 and 2 respectively.

There are no commitments made in this letter. If you have any further questions, please contact us.

Very truly yours,



D. A. Christian
Vice President – Nuclear Operations

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Attachments:

Attachment 1	Discussion of Changes
Attachment 2	Technical Specification Bases Changes

cc: U.S. Nuclear Regulatory Commission
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Attachment 1

Discussion of Changes

**North Anna Power Station
Units 1 and 2
Virginia Electric and Power Company**

DISCUSSION OF CHANGE

Introduction

The applicable design code identified in the Technical Specification Bases Section 3/4.7.1.1 for the Main Steam Safety Valves (MSSV) is incorrect. The design relief capacity of the MSSVs was determined by the Integration Review Team review of the Main Steam System to be based on the requirements of the ASME Boiler and Pressure Code (B&PV), Section III, "Nuclear Vessels" 1968 Edition with Addenda through Winter, 1970. The current Bases states that the applicable design code is the 1971 Edition of Section III of the ASME B&PV Code. Changes will revise the Bases to specify the correct edition of the code.

An engineering review of the functional requirements for safety valves between the two editions of the code was performed whereby it was determined that they were the same in both editions of the code. Therefore, operability of the MSSVs is not affected and an Unreviewed Safety Question does not exist.

Design/Licensing Bases

The primary purpose of the Main Steam System is to direct dry, saturated steam from the steam generators to the high pressure turbine. Five main steam safety valves are provided for each steam generator and are designed to protect the integrity of the main steam piping from overpressurization. These ASME code safety valves are provided for each steam header to relieve excessive main steam system and/or steam generator pressure to the atmosphere.

Discussion

The Integrated Review Team's review of the North Anna Power Station Main Steam System identified that the applicable design code specified in the Technical Specifications Bases Section 3/4.7.1.1, "Safety Valves" for the Main Steam Safety Valves is incorrect. It was determined by the team that the design relief capacity of the MSSVs is based upon the requirements of Section III of the ASME B&PV Code, 1968 Edition with Addenda through Winter 1970 in lieu of the 1971 Edition of the code.

A review of the historical documentation identified that reference to the 1971 Edition of the code was made in the initial submittal of the Technical Specification Bases Section 3/4.7.1.1 to the NRC. However, the review also identified that the 1968 Edition of the code was referenced in the original Final Safety Analysis Report as well as the Updated Final Safety Analysis Report in Design Basis Section 10.3.1 for the Main Steam System. A review of the original Purchase

Orders NA-105/1105 and Specification NAS-89-02, "Specification for Main Steam Safety Valves for North Anna Power Station" determined that an applicable year of the ASME code was not specified. The ASME Code form, "Form NVP-1 Manufacturer's Data Report for Nuclear Pumps or Valves" supplied by Crosby Valve and Gage Company with the initial purchase order states that the valves were procured to the requirements of ASME Section III, Class II, 1968 Edition with Addenda through Winter 1970. This is consistent with the results of the reviews performed by the corporate Mechanical Engineering group and by the Configuration Management Integrated Review Team, and the resolution of Potential Problem Report 99-005.

Specific Changes

Revise second paragraph in the Units 1 and 2 Technical Specifications Bases Section 3/4.7.1.1 to reflect the correct Edition of the code as noted below:

The specified valve lift settings and relieving capacities are in accordance with the requirements of Section III of the ASME Boiler and Pressure Code, **1968 Edition with Addenda through Winter, 1970.**

Safety Significance

This correction to the Unit 1 and Unit 2 Technical Specifications Bases to identify the correct code edition for the Main Steam Safety Valves does not create an unreviewed safety question as described below:

- The Bases change does not increase probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

Correcting the code edition specified in the Bases for the Main Steam Safety Valves has no impact on the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the safety analysis report. An engineering review of the functional requirements for the safety valves between the two editions of the code was performed whereby it was determined that they were the same

- The Bases change does not create the possibility of an accident or malfunction of a different type than any evaluated previously in the safety analysis report.

Correcting the code edition specified in the Bases for the Main Steam Safety Valves does not create the possibility of an accident or malfunction

of a different type than any previously evaluated in the safety analysis report. An engineering review of the functional requirements for the safety valves between the two editions of the code was performed whereby it was determined that they were the same. This change will make the basis consistent with the correct Edition of the code specified in the UFSAR.

- This Bases change does not result in a reduction of margin of safety as defined in the basis for any Technical Specifications.

Correcting the code edition specified in the Bases for the Main Steam Safety Valves does not result in a reduction of the margin of safety. An engineering review of the functional requirements for the safety valves between the two editions of the code was performed whereby it was determined that they were the same. The margin of safety is not reduced since the change has no effect on any safety analysis assumptions.

Attachment 2

Technical Specifications Bases Changes

**North Anna Power Station
Units 1 and 2
Virginia Electric and Power Company**