



March 15, 1993

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

Serial No.	93-122
NL&P/ETS:	R0
Docket Nos.	50-280
	50-281
License Nos.	DPR-32
	DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY SURRY POWER STATION UNITS 1 AND 2 PROPOSED TECHNICAL SPECIFICATIONS CHANGES MAIN CONTROL ROOM AND EMERGENCY SWITCHGEAR ROOM AIR CONDITIONING SYSTEM

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. DPR-32 and DPR-37 for Surry Power Station Units 1 and 2, respectively. The proposed changes will permit use of the two new Main Control Room and Emergency Switchgear Room Air Conditioning System chillers, when fully operational, to meet the Limiting Condition for Operation. In addition, an action statement is being proposed which provides one hour to restore a chiller to operable status when two of the required three chillers become inoperable.

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.

In order to maintain the current schedule for the Main Control Room and Emergency Switchgear Room Air Conditioning System upgrade project, the flexibility provided by these proposed Technical Specification changes is required. Therefore, we request your review by August 31, 1993.

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

Very truly yours,

W. L. Stewart

Senior Vice President - Nuclear

Attachments

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

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

Commissioner Department of Health Room 400 109 Governor Street 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 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 <u>/5</u> day of <u>March</u>, 19<u>93</u>. My Commission Expires: May 31, 1994.

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Attachment 1

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Discussion of Changes

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Discussion of Changes

Introduction

Surry Power Station initiated a Main Control Room and Emergency Switchgear Room (MCR & ESGR) Air Conditioning System Upgrade Program in 1988. The program includes installing larger capacity Air Handling Units (AHU) and installing additional chiller capacity. After the additional chiller capacity is installed, electrical power modifications are required to the three existing chillers (1-VS-E- 4A, 4B, and 4C) to complete the upgrade program. To complete these final modifications, the existing Technical Specifications must be revised to permit credit being taken for the new chillers in satisfying Technical Specification operability requirements.

<u>Background</u>

The original plant design included two redundant 100% capacity trains of air conditioning with an installed 100% capacity chiller for maintenance. Since initial operation, incremental heat loads have been added to the MCR & ESGR envelope. The net effect of the increased heat loads has been to reduce the capacity of each train of the air conditioning system to less than 100%. Therefore, it became necessary to increase the capacity of the AHUs and the chillers to return the system to the original design capability. To support continued operation, interim modifications were completed on the AHUs and chillers and operating restrictions (Technical Specification requirements) were placed on both the AHUs and the chillers. In addition, a fire watch was required in the ESGRs and Mechanical Equipment Room No. 3 (MER-3) for Appendix R consideration. These interim modifications and operating restrictions ensured adequate heat removal during both normal and accident conditions.

To date, the AHUs have been replaced with larger capacity units which return the air handling capacity of the two trains to 100% capacity. Consequently, the interim operating restrictions on the AHUs have been removed. Returning the air handling capacity to 100% also eliminates the need for a fire watch in the ESGRs. Work on the additional chiller capacity is underway. Thus, the interim operating restrictions and the MER-3 firewatch are still necessary for the chillers.

The three existing chillers (1-VS-E-4A, 4B, and 4C) are required to be operable to provide 100% air conditioning capacity. To ensure that 100% air conditioning capacity will be available during any accident scenario with a Loss of Offsite Power and a single failure,

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one of the three chillers has a manual transfer switch that permits the chiller to be powered from an alternate emergency power supply. Additionally, operator action is necessary to align the AHUs to the available chillers and to align the swing chiller to the operable power supply in the event of a total Loss of Offsite Power to the station with a single failure to an emergency bus or a chiller. After the two additional chillers are installed and electrical power modifications are completed to the existing chillers, the MCR and ESGR Air Conditioning System can be operated to eliminate the necessity for manual realignment of the AHUs and the swing chiller.

To complete the MCR & ESGR Air Conditioning System Upgrade Program the existing interim operating restrictions in Technical Specifications must be revised to permit use of the two new safety-related chillers (1-VS-E-4D and 4E) to meet the operability requirements and complete the final plant modifications. Eliminating specific chiller identification from the Technical Specifications provides the flexibility necessary to use the two new safety-related chillers to support plant operation and remove an existing chiller from service for modification while maintaining the required chiller capacity and equipment redundancy.

Specific Changes

Technical Specification 3.23.C.1.a requires chillers 1-VS-E-4A, 4B, and 4C to be operable whenever either unit is above Cold Shutdown. The proposed Technical Specification changes will require:

- three main control and emergency switchgear room chillers be operable whenever either unit is above Cold Shutdown,
- the three operable chillers be powered from three of the four emergency buses, and
- one of the three operable chillers be capable of being powered from the fourth emergency bus.

An action statement is being added to allow one hour to restore one of two inoperable chillers to operable, when two of the three required chillers become inoperable, prior to shutting down both units. This action statement will eliminate immediate entry into TS 3.0.1.

action statements (Amendments Nos. 168 and 167). The connections have been completed. Thus, the footnote alluding to the planned entries into the action statement is being deleted.

The AHUs have been replaced with larger capacity units which return the AHU trains to 100% capacity, and the interim operating restrictions on the AHUs have been removed. With the AHUs returned to 100% capacity the associated fire watch is no longer necessary in the ESGRs. Therefore, the Basis Section is being revised to delete the required fire watch in the ESGRs.

The Basis Section is being changed to discuss the configuration and operation of the MCR and ESGR air conditioning system with the two new safety-related chillers.

The Basis Section of Technical Specification 3.16 is being changed to reflect the new power scheme of the five control room chillers and associated chilled water pumps. Each emergency bus will be capable of powering two chillers and the associated chilled water pumps.

Defined words are being capitalized throughout Section 3.23. In addition, system names are being capitalized and acronyms are being spelled out for consistency.

Safety Significance

These Technical Specifications changes will eliminate the specific chiller identification from the operability requirement of Technical Specification 3.23.C.1.a. These changes will continue to provide 100% air conditioning system capacity to support plant operations. The revised Technical Specifications will continue to require three operable chillers, powered from three of the four emergency buses with one of the chillers capable of being powered from the fourth emergency bus, whenever either unit is above Cold Shutdown. This requirement meets the single failure requirements and provides adequate heat removal capacity during both normal and accident conditions.

Operation of the MCR and ESGR Air Conditioning System following these modifications continues to ensure adequate cooling capacity for normal and accident conditions. Equipment redundancy prevents a total loss of air conditioning during any single failure.