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**UNION
ELECTRIC**

 December 11, 1990

Donald F. Schnell
Senior Vice President
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U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
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ULNRC-2339

Gentlemen:

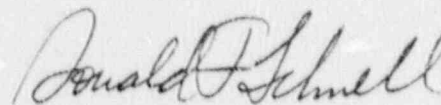
DOCKET NUMBER 50-483
CALLAWAY PLANT
REVISION TO TECHNICAL SPECIFICATION 3/4.6.2.3
CONTAINMENT COOLING SYSTEM

Union Electric Company herewith transmits an application for amendment to Facility Operating License No. NPF-30 for Callaway Plant

This amendment application deletes the surveillance requirements to verify cooling water flow rates to the containment coolers. This deletion is justifiable since Callaway Plant currently has in place a program to verify the design function of all safety-related heat exchangers cooled by the Essential Service Water System.

Attachments 1, 2, and 3 contain the Safety Evaluation, the Significant Hazards Evaluation, and the Proposed Technical Specification Changes in support of this amendment request.

Very truly yours,



Donald F. Schnell

JMC/dls

Attachments

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ADD

STATE OF MISSOURI)
) S S
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Donald F. Schnell, of lawful age, being first duly sworn upon oath says that he is Senior Vice President-Nuclear and an officer of Union Electric Company; that he has read the foregoing document and knows the content thereof; that he has executed the same for and on behalf of said company with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By Donald F. Schnell
Donald F. Schnell
Senior Vice President
Nuclear

SUBSCRIBED and sworn to before me this 11th day
of December, 1990.

Barbara J. Pfaff
BARBARA J. PFAFF
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MY COMMISSION EXPIRES APRIL 22, 1993
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SAFETY EVALUATION

This amendment request revises Technical Specification 3/4.6.2.3 Containment Cooling System. The proposed revision deletes the surveillance requirements to verify cooling water flow rates to the containment coolers. The verification of cooling water flow rate is intended to ensure that the containment air temperature will be maintained within limits during normal operation, and that adequate heat removal capacity is available when operated in conjunction with the containment spray systems during post-LOCA conditions.

Surveillance 4.6.2.3.a.2 requires a verification of cooling water flow of greater than or equal to 2200 gallons per minute (gpm) to each containment cooler group be completed at least once per 31 days. The intent of this surveillance is to evaluate any flow discrepancies for evidence of flow degradation. The normal non-safety related Service Water system was originally used for this verification; however, due to the seasonal changes in valve positions, the data gathered could not be trended to detect cooler fouling conditions. Testing the coolers using the Essential Service Water (ESW) System in an emergency lineup was found to give consistent results and would allow flow degradation to be detected. In lieu of revising Surveillance 4.6.2.3.a.2 to add information specifying that ESW should be used when verifying the cooling water flow rate to the containment coolers, this verification requirement is being deleted. This deletion is justifiable since Callaway Plant currently has in place a program to verify the design function of all safety-related heat exchangers cooled by the ESW System. The Callaway Plant Heat Exchanger Monitoring Program is described in the Union Electric response to NRC Generic Letter 89-13, reference ULNRC-2146 dated 1/29/90. The program requires the major branch flows of the ESW System in an emergency lineup to be verified and trended every month to detect flow degradation. In addition to the monthly verification, a complete ESW flow balance verification is performed every 18 months. The containment coolers' heat removal rate is trended and compared to design values to identify degraded equipment. Therefore, the Callaway Plant Heat Exchanger Monitoring Program is a more comprehensive and more effective method of assuring heat exchanger and system performance and obviates the need for Surveillance 4.6.2.3.a.2. This surveillance can be deleted from the Technical Specifications.

Surveillance 4.6.2.3.b requires at least once per 18 months a verification that the cooling water flow to each containment cooler group increases to at least 4000 gpm upon receipt of a Safety Injection (SI) test signal. The intent of this surveillance is to detect any flow degradation at the increased flow rate, which is needed to maximize heat removal at post-accident conditions. This surveillance can also be deleted since the Callaway Plant Heat Exchanger Monitoring Program requires monthly testing of these coolers in an emergency lineup

to verify and trend the flow for any degradation and in addition to this, a complete ESW flow balance verification is performed every 18 months. Surveillance 4.7.4.b.1 also requires a verification that ESW valves, which reposition to achieve the proper ESW flow to the coolers, open upon receipt of an SI signal.

The proposed change to Technical Specification 3/4.6.2.3 does not involve an unreviewed safety question because operation of Callaway Plant with this change would not:

1. Increase the probability of occurrence of the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report. This change does not affect the operability requirements of the Containment Cooling System or the ability of the system to perform its intended safety function. The change merely changes Technical Specification Surveillances to programmatic surveillances, which are more effective in assuring proper system performance.
2. Create a possibility for an accident or malfunction of a different type than any previously evaluated in the safety analysis report. There is no new type of accident or malfunction being created and the method and manner of plant operation remains unchanged. The change clarifies the surveillance requirements by deleting the unclear surveillance requirements.
3. Reduce the margin of safety as defined in the basis for any technical specification. This is based on the fact that no plant design changes are involved and the surveillance program assures proper performance of the Containment Cooling System.

Given the above discussions as well as those presented in the Significant Hazards Evaluation, the proposed change does not adversely affect or endanger the health or safety of the general public or involve a significant safety hazard.

SIGNIFICANT HAZARDS EVALUATION

This amendment application requests a change to Technical Specification 3/4.6.2.3, Containment Cooling System, to delete the surveillance requirements to verify cooling water flow rates to the containment coolers. The cooling water flow rate verification is to ensure that the containment air temperature will be maintained within limits during normal operation, and that adequate heat removal capacity is available when operated in conjunction with the Containment Spray Systems during post-LOCA conditions.

The proposed change to Technical Specification 3/4.6.2.3 does not involve a significant hazards consideration because operation of Callaway Plant with this change would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. The current Technical Specification Surveillances do not provide adequate direction as to how to perform the flow rate verifications. This proposed change deletes these ambiguous requirements. They are instead being performed as a part of the Callaway Plant Heat Exchanger Monitoring Program which is described in the UE response to NRC Generic Letter 89-13. This program detects degraded flow rates thus ensuring that the Containment Cooling System can perform its intended safety function.
2. Create the possibility of a new or different kind of accident from any previously evaluated. There is no new type of accident or malfunction being created and the method and manner of plant operation remains unchanged. The change provides an alternate method to verify cooling water flow rates are sufficient to maintain the containment air temperature at an acceptable level during normal and emergency operation.
3. Involve a significant reduction in a margin of safety. The margin of safety remains unaffected since no design change is being made and the surveillance program assures proper performance of the containment cooling system.

As discussed above, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated or create the possibility of a new or different kind of accident from any previously evaluated. This change does not result in a significant reduction in a margin of safety. Therefore, it has been determined that the proposed change does not involve a significant hazards consideration.