AmerenUE
Callaway Plant

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January 18, 2001

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

Gentlemen:

ULNRC-04371

DOCKET NUMBER 50-483
UNION ELECTRIC COMPANY
CALLAWAY PLANT
POST ACCIDENT SAMPLING SYSTEM ELIMINATION

Reference: OL Amendment No. 133 dated May 28, 1999, Improved Technical Specifications.

AmerenUE herewith transmits an application for amendment to Facility Operating License No. NPF-30 for the Callaway Plant.

The proposed amendment would delete Technical Specification (TS) 5.5.3, "Post Accident Sampling System," for the elimination of requirements for a Post Accident Sampling System (PASS). The change is consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The availability of this technical specification improvement was announced in the Federal Register on October 31, 2000 as part of the Consolidated Line Item Improvement Process (CLIIP).

The Callaway Plant Onsite Review Committee and the Nuclear Safety Review Board have reviewed this amendment application. Attachment 1 provides a description of the proposed change, the requested confirmation of applicability, and plant specific verifications. Attachment 2 provides the existing TS pages marked-up to show the proposed change. Attachment 3 provides revised clean technical specification pages. Attachment 4 provides a summary of the regulatory commitments made in this submittal. Attachment 5 provides the existing TS Bases pages marked-up to show the proposed change for information only and will be implemented under our TS 5.5.14 Bases Control Program after NRC approval of this amendment application.

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Approval of this amendment application is requested by March 15, 2001. The amendment will be implemented within 60 days after approval with the following exceptions; 1) the commitments scheduled in Table 4, and 2) the retirement of PASS equipment and its associated system interfaces, which will be performed during Refuel 12 (Fall, 2002). The approval date was administratively selected to allow for NRC review but the plant does not require this amendment to allow continued safe full power operation

If you have any questions on this amendment application, please contact us.

Very truly yours,

for Alan C. Passwater
Manager-Corporate Nuclear Services

BFH/

Attachments:
1. Description and Assessment
2. Proposed Technical Specification Change
3. Revised Technical Specification Page
4. Regulatory Commitments
5. Proposed Technical Specification Bases Changes

STATE OF MISSOURI)
) S S
COUNTY OF CALLAWAY)

David Shafer, of lawful age, being first duly sworn upon oath says that he is Supervising Engineer, Corporate Nuclear Services, Regulatory Operations for 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 David Shafer
David Shafer
Supervising Engineer,
Regulatory Operations,
Corporate Nuclear Services

SUBSCRIBED and sworn to before me this 18th day of January, 2001.

Gloria J Taylor

NOTARY PUBLIC
STATE OF MISSOURI - CALLAWAY COUNTY
NOTARY SEAL
MY COMMISSION EXPIRES JUNE 21, 2003

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ATTACHMENT ONE

DESCRIPTION AND ASSESSMENT

Discussion and Assessment

1.0 INTRODUCTION

This amendment application is a request pursuant to 10 CFR 50.90 to revise Technical Specification (TS) 5.5.3, "Post Accident Sampling System." for the Callaway Plant.

The changes to the TS Bases and FSAR that are currently anticipated as a result of this amendment application are provided in Attachment 5 and 6 respectively (for information only).

2.0 DESCRIPTION

The proposed License amendment deletes the program requirements of TS 5.5.3, "Post Accident Sampling System."

The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The availability of this technical specification improvement was announced in Federal Register on October 31, 2000 as part of the Consolidated Line Item Improvement Process (CLIIP).

3.0 BACKGROUND

Westinghouse Owners Group (WOG) topical report WCAP-14986-A, Rev. 2, "Post Accident Sampling System Requirements: A Technical Basis," evaluated the PASS requirements to determine their contribution to plant safety and accident recovery. The topical report considered the progression and consequences of core damage accidents and assessed the accident progression with respect to plant abnormal and emergency operating procedures, severe accident management guidance, and emergency plans. WCAP-14986-A, Rev. 2, concluded that the current PASS samples specified in NUREG-0737, "Clarification of TMI Action Plan Requirements," may be eliminated.

4.0 APPLICABILITY OF PUBLISHED SAFETY EVALUATION

AmerenUE has reviewed the safety evaluation published on October 31, 2000 as part of the CLIIP. This verification included a review of the NRC staff's evaluation as well as the supporting information provided to support TSTF-366 (i.e., WCAP-14986-A, Rev.2, "Post Accident Sampling System Requirements: A Technical Basis," submitted October 26, 1998, as supplemented by letters dated April 28, 1999, April 10, 2000, and May 22, 2000). AmerenUE has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to the Callaway Plant and justify this amendment

for the incorporation of the changes to the Callaway Plant Technical Specifications.

AmerenUE is not proposing any variations or deviations from the technical specification changes described in TSTF-366 or the NRC staff's model safety evaluation published on October 31, 2000.

5.0 VERIFICATIONS AND COMMITMENTS

As discussed in the notice of availability for this technical specification improvement, we offer the following plant-specific verifications and commitments.

5.1 AmerenUE will develop contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump, and containment atmosphere. The contingency plans will be contained in plant procedures and established within 180 days of implementation of the License amendment. Establishment of contingency plans is considered a regulatory commitment.

5.2 The capability for classifying fuel damage events at the Alert level threshold will be established for the Callaway Plant at radioactivity levels of 300 µCi/cc dose equivalent iodine. This capability will be described in plant procedures and established within 180 days of implementation of the License amendment. The capability for classifying fuel damage events is considered a regulatory commitment.

5.3 AmerenUE has established the capability to monitor radioactive iodines that have been released to offsite environs. This capability is described in our emergency plan implementing procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.

6.0 REGULATORY ANALYSIS

6.1 Proposed No Significant Hazards Determination

AmerenUE has reviewed the proposed no significant hazards consideration determination published on October 31, 2000 as part of the CLIIP. AmerenUE has concluded that the proposed determination presented in the notice is applicable to the Callaway Plant and the determination is hereby incorporated, by reference to satisfy the requirements of 10 CFR 50.91(a).

6.2 Environmental Evaluation

AmerenUE has reviewed the environmental evaluation included in the model safety evaluation published on October 31, 2000 as part of the CLIIP. AmerenUE has concluded that the staff's findings presented in that evaluation are applicable to Callaway Plant and the evaluation is hereby incorporated by reference for this application.

ATTACHMENT TWO

PROPOSED TECHNICAL SPECIFICATION CHANGE

5.5 Programs and Manuals (continued)

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the recirculation portion of the Containment Spray, Safety Injection, Chemical and Volume Control, and Residual Heat Removal. The program shall include the following:

a. Preventive maintenance and periodic visual inspection requirements; and

b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.3 Post Accident Sampling

Not Used.

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive iodine and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

a. Training of personnel;

b. Procedures for sampling and analysis; and

c. Provisions for maintenance of sampling and analysis equipment.

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5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to 10 times the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001 - 20.2402;

(continued)

ATTACHMENT THREE

REVISED TECHNICAL SPECIFICATION PAGE

5.5 Programs and Manuals (continued)

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the recirculation portion of the Containment Spray, Safety Injection, Chemical and Volume Control, and Residual Heat Removal. The program shall include the following:

a. Preventive maintenance and periodic visual inspection requirements; and

b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.3 Not Used

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to 10 times the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001 - 20.2402;

(continued)

ATTACHMENT FOUR

LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by AmerenUE in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments. Please direct questions regarding these commitments to Mr. Dave Shafer, Supervising Engineer – Regulatory Operations, (314) 554-3104.

REGULATORY COMMITMENTS	Due Date/Event
AmerenUE will developed contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump, and containment atmosphere. The contingency plans will be contained in plant procedures. Establishment of contingency plans is considered a regulatory commitment.	Established within 180 days of implementation of the Licensing amendment.
The capability for classifying fuel damage events at the Alert level threshold will be established for Callaway Plant at radioactivity levels of 300 µCi/cc dose equivalent iodine. This capability will be described in plant procedures. The capability for classifying fuel damage events is considered a regulatory commitment.	Established within 180 days of implementation of the Licensing amendment.
AmerenUE has established the capability to monitor radioactive iodines that have been released to offsite environs. This capability is described in our emergency plan implementing procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.	Complete

ATTACHMENT FIVE

PROPOSED TECHNICAL SPECIFICATION BASES CHANGE

TS BASES CN # 00-033

BASES

ACTIONS

G.1 (continued)

provide an alternate means for RVLIS. These three parameters provide diverse information to verify there is adequate core cooling. When Containment Radiation Level (High Range) monitors (GTRIC0059 and GTRIC0060 or GTRR0060) are inoperable, the PASS System is used as an alternate method to obtain RCS and containment atmosphere samples.

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SURVEILLANCE REQUIREMENTS

A Note has been added to the SR Table to clarify that SR 3.3.3.1 and SR 3.3.3.2 apply to each PAM instrumentation Function in Table 3.3.3-1.

SR 3.3.3.1

Performance of the CHANNEL CHECK once every 31 days ensures that a gross instrumentation failure has not occurred. A CHANNEL CHECK is normally a comparison of the parameter indicated on one channel to a similar parameter on other channels. It is based on the assumption that instrument channels monitoring the same parameter should read approximately the same value. Significant deviations between the two instrument channels could be an indication of excessive instrument drift in one of the channels or of something even more serious. A CHANNEL CHECK will detect gross channel failure; thus, it is key to verifying the instrumentation continues to operate properly between each CHANNEL CALIBRATION. The RM-23 unit display for loop GTR-0059 and either the RM-23 unit display or the GTRR0060 recorder for loop GTR-0060 must be used to perform the CHANNEL CHECK of the Containment Radiation Level (High Range) monitors.

Agreement criteria are determined by the unit staff, based on a combination of the channel instrument uncertainties, including isolation, indication, and readability. If a channel is outside the criteria, it may be an indication that the sensor or the signal processing equipment has drifted outside its limit. If the channels are within the criteria, it is an indication that the channels are OPERABLE.

As specified in the SR, a CHANNEL CHECK is only required for those channels that are normally energized. The containment hydrogen analyzers are not normally energized.

The Frequency of 31 days is based on operating experience that demonstrates that channel failure is rare. The CHANNEL CHECK

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the area radiation monitors inside containment are used as an alternate method below 10 R/hr and portable survey equipment with the capability to detect gamma radiation over the range 1E-03 to 1E0 4 is used above 10R/hr.

TS BASES CN # 00-033

BASES

ACTIONS (continued)

monitoring system are inoperable. This allowance is provided because other instrumentation is available to monitor for RCS leakage.

A.1 and A.2

A primary system leak would result in reactor coolant flowing into the containment normal sumps or into the instrument tunnel sump. Indication of increasing sump level is transmitted to the control room by means of individual sump level transmitters. This information is used to provide the measurement of low leakage by monitoring level increase versus time.

With the required containment sump level and flow monitoring system inoperable, no other form of sampling can provide the equivalent information; however, the containment atmosphere particulate radioactivity monitor will provide indications of changes in leakage. Together with the atmosphere monitor, the periodic surveillance for RCS water inventory balance, SR 3.4.13.1, must be performed at an increased frequency of 24 hours to provide information that is adequate to detect leakage. A Note is added allowing that SR 3.4.13.1 is not required to be performed until 12 hours after establishing steady state operation (stable RCS pressure, temperature, power level, pressurizer and makeup tank levels, makeup and letdown, and RCP seal injection and return flows). The 12 hour allowance provides sufficient time to collect and process all necessary data after stable plant conditions are established.

Restoration of the required sump level and flow monitoring system to OPERABLE status within a Completion Time of 30 days is required to regain the function after the system's failure. This time is acceptable, considering the Frequency and adequacy of the RCS water inventory balance required by Required Action A.1.

B.1.1, B.1.2, and B.2

With the containment atmosphere particulate radioactivity monitoring instrumentation channel inoperable, alternative action is required. Either samples of the containment atmosphere must be taken and analyzed or water inventory balances, in accordance with SR 3.4.13.1, must be performed to provide alternate periodic information. Samples of the containment atmosphere are obtained and analyzed for gaseous and particulate radioactivity or a gamma isotopic analysis of the containment atmosphere may be performed using the Post Accident Sampling System.

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TS BASES CN # 00-033

BASES

ACTIONS

B.1.1, B.1.2, and B.2 (continued)

With a sample obtained and analyzed or water inventory balance performed every 24 hours, the reactor may be operated for up to 30 days to allow restoration of the required containment atmosphere particulate radioactivity monitor.

The 24 hour interval provides periodic information that is adequate to detect leakage. A Note is added allowing that SR 3.4.13.1 is not required to be performed until 12 hours after establishing steady state operation (stable RCS pressure, temperature, power level, pressurizer and makeup tank levels, makeup and letdown, and RCP seal injection and return flows). The 12 hour allowance provides sufficient time to collect and process all necessary data after stable plant conditions are established. The 30 day Completion Time recognizes at least one other form of leakage detection is available.

C.1.1, C.1.2, C.2.1, and C.2.2

With the required containment atmosphere gaseous radioactivity monitor and the required containment cooler condensate monitoring system inoperable, the means of detecting leakage are the containment sump level and flow monitoring system and the containment atmosphere particulate radioactivity monitor. This Condition does not provide all the required diverse means of leakage detection. With the containment atmosphere gaseous radioactivity monitoring and containment cooler condensate monitoring system instrumentation channels inoperable, alternative action is required. Either samples of the containment atmosphere must be taken and analyzed or water inventory balances, in accordance with SR 3.4.13.1, must be performed every 24 hours to provide alternate periodic information. Samples of the containment atmosphere are obtained and analyzed for gaseous and particulate radioactivity or a gamma isotopic analysis of the containment atmosphere may be performed using the Post Accident Sampling System. A Note is added allowing that SR 3.4.13.1 is not required to be performed until 12 hours after establishing steady state operation (stable RCS pressure, temperature, power level, pressurizer and makeup tank levels, makeup and letdown, and RCP seal injection and return flows). The 12 hour allowance provides sufficient time to collect and process all necessary data after stable plant conditions are established. The followup Required Action is to restore either of the inoperable required monitoring methods to OPERABLE status within 30 days to regain the intended leakage detection diversity. The 30 day Completion Time ensures that the plant will not be operated in a reduced configuration for a lengthy time period.

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