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November 22, 2000

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555-0001

Gentlemen: ULNRC-04348

DOCKET NUMBER 50-483
CALLAWAY PLANT
UNION ELECTRIC COMPANY
REVISION TO TECHNICAL SPECIFICATION 5.5.14
"TECHNICAL SPECIFICATIONS (TS) BASES CONTROL PROGRAM"

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

This proposed license amendment request (LAR) would revise Administrative Controls Technical Specifications (TS) 5.5.14b and 5.5.14b.2 to incorporate the changes made to 10 CFR 50.59. The proposed changes would replace the word "involve" with "require" in TS 5.5.14b and revise TS 5.5.14b.2 to state: "a change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59." The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-364, Revision 0, as amended by Westinghouse Owners Group (WOG) editorial change WOG-ED-24.

AmerenUE is submitting this license amendment application in conjunction with the industry consortium of five plants as a result of a mutual agreement known as Strategic Teaming and Resource Sharing (STARS). The STARS group consists of the five plants operated by TXU Electric, AmerenUE, Wolf Creek Nuclear Operating Corporation, Pacific Gas and Electric, and STP Nuclear Operating Company. AmerenUE is the lead utility for the proposed LAR and the other members of the STARS group can also be expected to submit plant-specific license amendment requests similar to this one. These additional LARs will be submitted in parallel with AmerenUE's application in order to reduce the amount of NRC resources required to evaluate and approve the applications.

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Attachments 1 through 6 provide the required affidavit, description and assessment, markup of TS page, retyped TS page, STARS comparison table, and the affected FSAR pages.

AmerenUE requests approval of the proposed license amendment by February 28, 2001, with the amendment being implemented within 60 days of issuance of the license amendment. The requested approval date coincides with the expected implementation date for the final rule associated with 10CFR50.59.

It has been determined that this amendment application does not involve a significant hazard consideration as determined per 10 CFR 50.92. Pursuant to 10 CFR 51.22(b), no environmental assessment need be prepared in connection with the issuance of this amendment.

If you have any questions on this amendment application, please contact Mr. Dave Shafer at (314) 554-3104.

Very truly yours,

David Shafer
for Alan C. Passwater
Manager, Corporate Nuclear Services

JMC/

Attachments:
1) Affidavit
2) Description and Assessment
3) Markup of Technical Specification page
4) Retyped Technical Specification page
5) Affected FSAR Pages
6) STARS Joint LAR Comparison Table

STATE OF MISSOURI)
) S S
CITY OF ST. LOUIS)

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 22nd day of November, 2000.

Melissa L. Orr

MELISSA L. ORR
Notary Public - Notary Seal
STATE OF MISSOURI
City of St. Louis
My Commission Expires: June 23, 2003

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ATTACHMENT 2

DESCRIPTION AND ASSESSMENT

DESCRIPTION AND ASSESSMENT

1.0 INTRODUCTION

1.1 This proposed License Amendment Request (LAR) is a request pursuant to 10 CFR 50.90 to revise Technical Specification (TS) 5.5.14b and TS 5.5.14b.2, "Technical Specifications (TS) Bases Control Program," for Callaway Plant.

1.2 Final Safety Analysis Report (FSAR) Section

Changes to the Callaway Plant FSAR will be processed upon approval of this LAR. Affected pages are attached for your reference (Attachment 6).

2.0 DESCRIPTION

The proposed License Amendment would revise Administrative Controls TS 5.5.14b and 5.5.14b.2 to incorporate the changes made to 10 CFR 50.59 as published in the Federal Register (Reference 1). The proposed changes would replace the word "involve" with "require" in TS 5.5.14b and revise TS 5.5.14b.2 to state: "a change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59."

3.0 BACKGROUND

10 CFR 50.59 establishes the conditions under which licensees may make changes to the facility or procedures and conduct tests or experiments without prior NRC approval.

In 1999, the NRC revised its regulation (Reference 1) controlling changes, tests and experiments performed by nuclear plant licensees. The changes were prompted by the need to resolve differences in interpretations of the rule's requirements by the industry and the NRC that came into clear focus in 1996. The rule change had two principal objectives, both aimed at restoring much needed regulatory stability to this extensively used regulation:

- Establish clear definitions to promote common understanding of the rule's requirements and

- Clarify the criteria for determining when changes, tests, and experiments require prior NRC approval.

The changes approved by the Commission in 1999 made 10 CFR 50.59 more focused and efficient by:

- Providing greater flexibility to licensees, primarily by allowing changes that have minimal safety impact to be made without NRC approval and

- Clarifying the threshold for "screening out" changes that do not require full evaluation under 10 CFR 50.59, primarily by adoption of key definitions and codifying the screening process.

Proposed changes, tests, and experiments that satisfy the definitions and one or more of the criteria in the rule must be reviewed and approved by the NRC before implementation.

The current TS Bases Control Program required by TS 5.5.14 allows licensees to make a change to the Bases without NRC approval provided the change does not involve "a change to the updated FSAR or Bases that involves an unreviewed safety question as defined in 10 CFR 50.59." With the revisions to 10 CFR 50.59, the term "unreviewed safety question" was eliminated. Therefore, the TS should be revised to be consistent with the revision to 10 CFR 50.59. The proposed change is described below and is consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-364, Revision 0 as amended by Westinghouse Owners Group (WOG) editorial change WOG-ED-24, (Reference 2).

4.0 TECHNICAL ANALYSIS

The proposed changes to TS 5.5.14 are made as a result of the NRC amending its regulation, 10 CFR 50.59, concerning the authority for licensees of production or utilization facilities, such as nuclear reactors, and independent spent fuel storage facilities, and for certificate holders for spent fuel storage casks, to make changes to the facility or procedures, or to conduct tests or experiments, without prior NRC approval. The final rule clarifies the specific types of changes, tests, and experiments conducted at a licensed facility or by a certificate holder that require evaluation, and revises the criteria that licensees and certificate holders must use to determine when NRC approval is needed before such changes, tests, or experiments can be implemented. The revised regulation eliminates the term "unreviewed safety question," adds definitions for terms that have been subject to differing interpretations, and reorganizes the language of the regulation for clarity.

The proposed changes to TS 5.5.14 to incorporate the NRC approved TSTF-364, Revision 0 as amended by WOG-ED-24 do not have any impact on FSAR accident analyses. This change is administrative in nature based on the revision of 10 CFR 50.59.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Determination

AmerenUE has evaluated whether or not a significant hazards consideration is involved with the proposed changes by focusing on the three standards set forth in 10 CFR 50.92 as discussed below:

1. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No

   The proposed changes replace the word "involve" with "require" and deletes the phrase "unreviewed safety question" as defined in 10 CFR 50.59. The above changes are consistent with the revision to 10 CFR 50.59. Consequently, the

probability of an accident previously evaluated is not significantly increased. Changes to the Technical Specification Bases are still evaluated in accordance with 10 CFR 50.59. As a result, the consequences of any accident previously evaluated are not affected.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No

   The proposed changes do not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing plant operation. These changes are considered administrative changes and do not modify, add, delete, or relocate any technical requirements in the TS.

   Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. Do the proposed changes involve a significant reduction in a margin of safety?

   Response: No

   The proposed changes will not reduce the margin of safety because they have no effect on any safety analyses assumptions. Changes to the TS Bases that result in meeting the criteria in paragraph (c)(2) of 10 CFR 50.59 will still require NRC approval. The proposed changes to TS 5.5.14 are considered administrative in nature based on the revisions to 10 CFR 50.59.

   Therefore, the proposed changes do not involve a reduction in a margin of safety.

Based on the above evaluations, AmerenUE concludes that the activities associated with the above described changes present no significant hazards consideration under the standards set forth in 10 CFR 50.92 and accordingly, a finding by the NRC of no significant hazards consideration is justified.

5.2 Regulatory Safety Analysis

Applicable Regulatory Requirements/Criteria

The regulatory basis for TS 5.5.14 is to ensure a program exists for processing changes to the TS Bases. These changes may or may not require NRC approval when evaluated in accordance with the requirements of 10 CFR 50.59.

10 CFR 50.36(a) requires that the TS have a summary statement of the bases or reasons for such specifications, but shall not become part of the TS. Thus, the Bases are required per this regulation but are not a part of the TS.

10 CFR 50.36(c)(5) requires that the TS include a category called "Administrative Control," that contains the provisions relating to organization and management, procedures, record keeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

Analysis

The regulatory requirements/criteria continue to be met. Changes to the TS Bases will still be regulated by the latest revision to 10 CFR 50.59.

Conclusion

The proposed LAR is in compliance with 10 CFR 50.36(a), 10 CFR 50.36(c)(5), and 10 CFR 50.59.

6.0 ENVIRONMENTAL EVALUATION

AmerenUE has determined that the proposed amendment is a revision to an administrative procedure as described in 10 CFR 51.22(c)(10). Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed changes is not required.

7.0 REFERENCES

1. Federal Register, Vol. 64, No. 191, pg. 53582, "Changes, Tests, and Experiments."

2. Industry/TSTF Standard Technical Specification Change Traveler TSTF-364, "Revision to TS Bases Control Program to Incorporate Changes to 10 CFR 50.59," Rev 0 as amended by WOG ED-24.

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ATTACHMENT 3

MARKUP OF TECHNICAL SPECIFICATION PAGE

5.5 Programs and Manuals (continued)

5.5.14 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

b. Licensees may make changes to Bases without prior NRC approval provided the changes do not ~~involve~~ **require** either of the following:

1. a change in the TS incorporated in the license; or

2. a change to the updated FSAR or Bases that ~~involves an unreviewed safety question as defined in~~ **requires NRC approval pursuant to** 10 CFR 50.59.

c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the FSAR.

d. Proposed changes that meet the criteria of Specification 5.5.14b above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

5.5.15 Safety Function Determination Program (SFDP)

This program ensures loss of safety function is detected and appropriate actions taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other appropriate actions may be taken as a result of the support system inoperability and corresponding exception to entering supported system Condition and Required Actions. This program implements the requirements of LCO 3.0.6. The SFDP shall contain the following:

a. Provisions for cross train checks to ensure a loss of the capability to perform the safety function assumed in the accident analysis does not go undetected;

b. Provisions for ensuring the plant is maintained in a safe condition if a loss of function condition exists;

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ATTACHMENT 4

RETYPED TECHNICAL SPECIFICATION PAGE

5.5 Programs and Manuals (continued)

5.5.14 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

b. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:

1. a change in the TS incorporated in the license; or

2. a change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.

c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the FSAR.

d. Proposed changes that meet the criteria of Specification 5.5.14b above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

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b. Provisions for ensuring the plant is maintained in a safe condition if a loss of function condition exists;

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ATTACHMENT 5

STARS JOINT LAR COMPARISON TABLE

STARS JOINT LAR COMPARISON TABLE

CHANGE DESCRIPTION	CALLAWAY [1]	COMANCHE PEAK	DIABLO CANYON	SOUTH TEXAS PROJECT	WOLF CREEK
INTRODUCTION		Includes proposed changes to TS 5.5.17.		STP will submit similar changes as part of a separate license amendment request to revise portions of Section 6.0 of the STP Technical Specifications.	
DESCRIPTION (add rows as necessary to describe TS changes)		Includes proposed changes to TS 5.5.17.			
BACKGROUND		Includes proposed changes to TS 5.5.17.			
TECHNICAL ANALYSIS		Includes proposed changes to TS 5.5.17.			
NO SIGNIFICANT HAZARDS DETERMINATION		Includes proposed changes to TS 5.5.17.			
REGULATORY SAFETY ANALYSIS		Includes proposed changes to TS 5.5.17.			
ENVIRONMENTAL EVALUATION					
REFERENCES					

[1] AmerenUE is the lead utility for this LAR. This table identifies differences from the lead utility application.

SCHEDULAR TABLE [2]

PROPOSED DATE	CALLAWAY	COMANCHE PEAK	DIABLO CANYON	SOUTH TEXAS PROJECT	WOLF CREEK
EXPECTED SUBMITTAL DATE	11/22/00	12/08/00	12/06/00	SEE NOTE BELOW	12/06/00
REQUESTED APPROVAL DATE	02/28/01	02/28/01	02/28/01	SEE NOTE BELOW	02/28/01
IMPLEMENTATION PERIOD	60 DAYS	60 DAYS	60 DAYS	SEE NOTE BELOW	60 DAYS

[2] This Table provides schedule only and is not considered a part of the LAR submittal.
NOTE: South Texas Project's submittal will be at a later date to be coordinated with their project manager.

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ATTACHMENT 6

AFFECTED FINAL SAFETY ANALYSIS PAGES

FSAR CN # 00-069
OL# 1213

psia). The plant allowance available between the DNBRs used in the safety analyses and the design DNBR values is not needed to meet the design basis discussed earlier. This allowance can be used for flexibility in the design, operation, and analyses of the plant. For instance, the allowance may be used for improved fuel management or increased plant availability.

The design DNBRs of 1.33 and 1.35 (STD/OFA) and 1.33 and 1.34 (V5/V+) are used as the bases for Technical Specifications, and for consideration ~~of the applicability of unreviewed safety questions as defined in~~ 10 CFR 50.59. in evaluations completed in accordance with

By preventing DNB, adequate heat transfer is assured between the fuel clad and the reactor coolant, thereby preventing clad damage as a result of inadequate cooling. Maximum fuel rod surface temperature is not a design basis as it will be within a few degrees of the coolant temperature during operation in the nucleate boiling region. Limits provided by the reactor control and protection systems are such that this design basis will be met for transients associated with Condition II events, including overpower transients. There is an additional large DNBR margin at rated power operation and during normal operating transients.

4.4.1.2 Fuel Temperature Design Basis

Basis

During modes of operation associated with Condition I and Condition II events, there is at least a 95-percent probability that the peak kW/ft fuel rods will not exceed the UO_2 melting temperature at the 95-percent confidence level. The melting temperature of UO_2 is taken as 5,080°F (Ref. 4), unirradiated and decreasing 58°F per 10,000 MWD/MTU. By precluding UO_2 melting, the fuel geometry is preserved, and possible adverse effects of molten UO_2 on the cladding are eliminated. To preclude center melting and as a basis for overpower protection system setpoints, a calculated centerline fuel temperature of 4,700°F has been selected as the overpower limit. This provides sufficient margin for uncertainties in the thermal evaluations, as described in Section 4.4.2.9.1.

Discussion

Fuel rod thermal evaluations are performed at rated power, maximum overpower, and during transients at various burnups. These analyses assure that this design basis, as well as the fuel integrity design bases given in Section 4.2, are met. They also provide input for the evaluation of Condition III and IV events given in Chapter 15.0.

4.4.1.3 Core Flow Design Basis

Basis

A minimum of 93.7/91.4 percent (thimble plugs installed/thimble plugs removed) of the thermal design flow rate will pass through the fuel rod region of the core and be effective for V5/V+ fuel rod cooling. Coolant flow through the thimble tubes, as well as the leakage from the core barrel-baffle region into the core, are not considered effective for heat removal. See Table 4.1-1 Item 9a.

expected in all subsequent cycles. This bounding analysis concept is the key to the Westinghouse reload safety analysis methodology. When all reload safety-related parameters for a given accident are bounded, the reference safety analysis is valid. On the other hand, when a reload parameter is not bounded, further evaluation is necessary. The purpose of this further evaluation is to confirm that the margin of safety defined in the basis for any technical specification is not reduced. This reload safety evaluation methodology is applied whenever the input parameter values for a reference safety analysis are available. In summary, Westinghouse reload safety evaluation methodology consists of:

1. A systematic evaluation to determine whether the reload parameters are bounded by the values used in the reference safety analysis.

2. A determination of the effects on the reference safety analysis when a reload parameter is not bounded to ensure that specified design bases are met.

When the above process identifies either a need for a license amendment ~~potential unreviewed safety question~~ or ~~the need for~~ a change in the plant Technical Specifications, Union Electric will make the appropriate notification to the NRC.

Q492.9 The staff has reviewed the applicants' response to the requirements of Item II.F.2 of NUREG-0737 and found that the applicants have not provided the documentation required by Item II.F.2. Therefore, the staff will require that the applicants provide the documentation required by Item II.F.2 of NUREG-0737.

RESPONSE

See revised Section 18.2.13.

Q492.10 Justify that the single upper head penetration meets the single failure requirement of NUREG-0737 and show that it does not negate the redundancy of the two instrument trains.

RESPONSE

Redundancy is not compromised by having a shared tap since it is not conceivable that the tap will fail either from plugging or breaking. Freedom from plugging is enhanced by 1) use of stainless steel connections which preclude corrosion products, and 2) absence of mechanisms, such as flow for concentrating boric acid. It is also inconceivable that the tap will break