

1901 Chouteau Avenue
Post Office Box 149
St. Louis, Missouri 63166
314-554-2650



Donald F. Schnell
Senior Vice President
Nuclear

April 1, 1997

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

Gentlemen:

ULNRC-3555

DOCKET NUMBER 50-483
CALLAWAY PLANT
REQUEST FOR EMERGENCY TECHNICAL SPECIFICATION CHANGE
FOR TURBINE DRIVEN AUXILIARY FEEDWATER PUMP START LOGIC

- References:
- 1) ULNRC-1822 dated August 30, 1988
 - 2) ULNRC-1862 dated November 18, 1988
 - 3) ULNRC-1863 dated November 18, 1988
 - 4) ULNRC-1884 dated December 28, 1988
 - 5) ULNRC-1905 dated February 7, 1989
 - 6) ULNRC-1911 dated February 10, 1989
 - 7) ULNRC-1913 dated February 15, 1989

Union Electric Company (UE) herewith transmits an application for emergency amendment to Facility Operating License NPF-30 for Callaway Plant. The change proposes to revise Technical Specification Table 3.3-3, Functional Unit 6.d, for the start logic of the Turbine Driven Auxiliary Feedwater Pump. Specifically, the "Channels to Trip" column for Functional Unit 6.d.2.a and 6.d.2.b is modified to correct editorial errors associated with the start logic of the Turbine Driven Auxiliary Feedwater Pump (TDAFP). Currently, the TS indicate that 2 of 4 Steam Generator Low-Low Water Level channels of any steam generator will actuate the TDAFP. The actual plant design requires 2 of 4 in any two steam generators for automatic actuation of the TDAFP.

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By letter dated April 14, 1989, and corrected by letter dated May 11, 1989, NRC issued Amendment 43 to Facility Operating License NPF-30. This amendment revised the TS related to the steam-generator low-low level trip circuitry by adding an Environmental Allowance Modifier (EAM) and a Trip Time Delay (TTD). Prior to Amendment 43, TS Table 3.3-3 correctly described the steam generator low-low start logic for the TDAFP. Amendment 43 approved changes proposed in References 1 - 7. However, due to administrative oversight, the "Channels to Trip" column was inadvertently changed in the TS markup of Reference 1, thus introducing the error.

On March 31, 1997, Callaway Plant staff discovered the error and notified the NRC Senior Resident Inspector. At 1500, the TDAFP was declared inoperable and TS Limiting Condition for Operation 3.7.1.2, Action a was entered. This requires that the inoperable pump be restored to operable status within 72 hours or the plant be shutdown to Mode 3 within the next six hours and in Mode 4 in the following 6 hours.

This situation could not be avoided because it involved an administrative oversight in a highly complex license amendment package. The specific wording in the "Channels to Trip" column for the TDAFP was not intentionally changed.

Pursuant to 10 CFR 50.91(a)(5), Union Electric hereby requests NRC emergency authorization and approval of this proposed amendment. The requested emergency authorization is appropriate because this amendment involves no significant hazards consideration (Attachment 1). In addition, the present situation could not be foreseen and avoided. As indicated, Union Electric has identified the issue and notified the NRC to pursue expeditious resolution of this matter. This TS change does not impact any hardware at Callaway Plant and simply proposes to bring the TS into agreement with the plant design.

The plant On-Site Review Committee and Nuclear Safety Review Board have reviewed and approved this amendment request.

If there are any questions relating to this information, please contact us. We appreciate your prompt attention to this amendment request.

R. Appelter
for Donald F. Schnell

Attachments: 1 - Significant Hazard Evaluation
2 - Environmental Consideration
3 - Technical Specifications Mark-up

STATE OF MISSOURI)
) S S
COUNTY OF CALLAWAY)

Ronald D. Affolter, of lawful age, being first duly sworn upon oath says that he, Plant Manager of the Callaway Nuclear Plant, Union Electric Company; 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 *R. Affolter*
Ronald D. Affolter
Plant Manager
Callaway Nuclear Plant

Subscribed and sworn to before me this 1st day of April, 1997.

Audrey A. Ternes
Notary Public

AUDREY A. TERNES
NOTARY PUBLIC
STATE OF MISSOURI - CALLAWAY COUNTY
NOTARY SEAL
MY COMMISSION EXPIRES OCTOBER 22, 2000

cc: M. H. Fletcher
Professional Nuclear Consulting, Inc.
19041 Raines Drive
Derwood, MD 20855-2432

Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 400
Arlington, TX 76011-8064

Senior Resident Inspector
Callaway Resident Office
U.S. Nuclear Regulatory Commission
8201 NRC Road
Steedman, MO 65077

Kristine M. Thomas (2)
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
1 White Flint, North, Mail Stop 13E16
11555 Rockville Pike
Rockville, MD 20852-2738

Manager, Electric Department
Missouri Public Service Commission
P.O. Box 360
Jefferson City, MO 65102

Ron Kucera
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

Don Woodlan
TU Electric
1601 Bryan Street
Dallas, TX 75201-3411

Pat Nugent
Pacific Gas & Electric
Regulatory Services
P.O. Box 56
Avila Beach, CA 93424

SIGNIFICANT HAZARDS EVALUATION
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SIGNIFICANT HAZARDS EVALUATION

- References: 1) NUREG-0830, Safety Evaluation Report related to Operation of Callaway Plant, Unit 1
2) Final Safety Analysis Report, Chapter 7.3.6.1.1

This amendment application revises the "Channels to Trip" column for Functional Units 6.d.2.a and 6.d.2.b of Technical Specifications (TS) Table 3.3-3 to correct an error in the logic for starting of the Turbine Driven Auxiliary Feedwater Pump (TDAFP) on steam generator low-low level. The current TS indicate that 2 of 4 steam generator low-low level channels in any steam generator will actuate the TDAFP. The actual plant design requires 2 of 4 in any two steam generators for automatic actuation of the TDAFP. The TS wording error was introduced in the Union Electric license amendment request associated with Amendment 43 to Facility Operating License NPF-30. This change is required to address compliance with the Callaway Technical Specifications.

BACKGROUND

The logic the Auxiliary Feedwater Actuation Signal - Turbine Driven (AFAS-T) from a steam generator low-low level signal has remained the same since operation of the facility began in 1984. FSAR Section 7.3.6.1.1 states that an AFAS-T is generated on low-low level in any two steam generators. This design was reviewed and accepted by NRC in Reference 1. The correct design of the logic was reflected in the Technical Specifications until April 14, 1989, when Amendment 43 was issued. Amendment 43 approved changes to the TS associated with the addition of an Environmental Allowance Modifier (EAM) and Trip Time Delay (TTD) to the steam generator low-low level circuitry. The hardware modification did not impact the start logic (i.e., number of steam generators with low-low level) of the TDAFP. However, when translating the information in the "Channels to Trip" column for Functional Item 6.d.2.a and .b of Table 3.3-3, the number "2" was inadvertently omitted such that the new TS indicated that low-low level in any steam generator would result in an AFAS-T. The surveillance testing associated with this TDAFP start logic has remained unchanged since initial startup and verifies the logic is correct per the plant design.

It should be noted that the information contained in the "Channels to Trip" column in Table 3.3-3 of the current TS is not included in NUREG-1431, Rev. 1, Standard Technical Specifications - Westinghouse Plants. Union Electric plans to submit an amendment request in May, 1997 to convert to the improved TS format. Through the conversion, information from the "Channels to Trip" column will be moved to the TS Bases. This error was discovered on March 31, 1997 during a review by Union Electric personnel while conducting reviews in support of NEI Initiative 96-05.

EVALUATION

The proposed change does not involve a significant hazards consideration because operation of Callaway Plant in accordance with these changes would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated.

All accident analyses of record are based on the actual plant design of the Turbine Driven Auxiliary Feedwater Actuation System. The wording in the current Technical Specifications does not accurately reflect plant design. Surveillance testing has and continues to verify actual plant design. This change will simply correct an administrative error associated with a previous amendment request and no new requirements are being imposed on any plant systems or components. The probability and consequences of the accidents previously evaluated in the Final Safety Analysis Report (FSAR) are unchanged.

- (2) Create the possibility of a new or different kind of accident from any previously evaluated.

This change does not impact any plant hardware and does not represent a change in design. This change brings the TS into conformance with the plant design which was evaluated and accepted in Section 7.3.1.10 of the Callaway Plant Safety Evaluation Report (Reference 1). No new accident initiators or transient precursors, failure mechanisms, or limiting single failures are introduced as a result of this change.

- (3) Involve a significant reduction in a margin of safety.

The safety margins of the Technical Specifications are based on the actual plant design and are unaffected by this change. The plant design has been evaluated and accepted by NRC via Reference 1. This change simply corrects an administrative error associated with a previous license amendment request and brings the TS into conformance with actual plant design.

Based upon the preceding information, it has been determined that the proposed change to the Technical Specifications does not involve an increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed change meets the requirements of 10 CFR 50.92(c) and does not involve a significant hazards consideration.

ENVIRONMENTAL CONSIDERATION
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ENVIRONMENTAL CONSIDERATION

This amendment application revises the "Channels to Trip" column for Functional Units 6.d.2.a and 6.d.2.b of Technical Specifications (TS) Table 3.3-3 to correct an error in the logic for starting of the Turbine Driven Auxiliary Feedwater Pump (TDAFP) on steam generator low-low level. The current TS indicate that two-out-of-four steam generator low-low level channels in any steam generator will actuate the TDAFP. The actual plant design requires two-out-of-four in any two steam generators for automatic actuation of the TDAFP. The TS wording error was introduced in the Union Electric license amendment request associated with Amendment 43 to Facility Operating License NPF-30. This change is required to address compliance with the Callaway Technical Specifications.

The proposed amendment involves changes with respect to the use of facility components located within the restricted area, as defined in 10 CFR 20. Union Electric has determined that the proposed amendment does not involve:

- (1) A significant hazard consideration, as discussed in Attachment 1 of this amendment application.
- (2) A significant change in the types or significant increase in the amounts of any effluents that may be related offsite.
- (3) A significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with issuance of this amendment.

TECHNICAL SPECIFICATIONS MARKUP
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