

July 21, 1987

Docket No. 50-483

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Mr. Donald F. Schnell  
Vice President - Nuclear  
Union Electric Company  
Post Office Box 149  
St. Louis, Missouri 63166

Dear Mr. Schnell:

The Commission has issued the enclosed Amendment No. 25 to Facility Operating License No. NPF-30 for the Callaway Plant, Unit 1. This amendment is in response to your application dated January 29, 1987 as supplemented by letter dated March 27, 1987.

The amendment revises Technical Specification 3/4.7.5 regarding the ultimate heat sink to provide clarification and delineate the fact that there are two separate trains of cooling available for the essential service water system.

A copy of the Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Thomas W. Alexion, Project Manager  
Project Directorate III-3  
Division of Reactor Projects

Enclosures:

1. Amendment No. 25 to License No. NPF-30
2. Safety Evaluation

cc w/enclosures:  
See next page

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Surname: PKreutzer  
Date: 06/25/87

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TAlexion/tg  
06/30/87

pdcc  
M. Katman  
07/01/87

PD/PDIII-3  
DWigginton  
07/21/87

*all with changes in effect in copy*

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Mr. D. F. Schnell  
Union Electric Company

Callaway Plant  
Unit No. 1

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

UNION ELECTRIC COMPANY

CALLAWAY PLANT, UNIT 1

DOCKET NO. STN 50-483

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 25  
License No. NPF-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment filed by Union Electric Company (the licensee) dated January 29, 1987 as supplemented by letter dated March 27, 1987 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-30 is hereby amended to read as follows:

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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 25, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into the license. UE shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



David L. Wigginton, Acting Director  
Project Directorate III-3  
Division of Reactor Projects

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: 07/21/87

ATTACHMENT TO LICENSE AMENDMENT NO. 25

OPERATING LICENSE NO. NPF-30

DOCKET NO. 50-483

Revise Appendix A Technical Specifications by removing the page identified below and inserting the enclosed page. The revised page is identified by the captioned amendment number and contains marginal lines indicating the area of change. The corresponding overleaf page is provided to maintain document completeness.

REMOVE

3/4 7-13

INSERT

3/4 7-13

## PLANT SYSTEMS

### 3/4.7.5 ULTIMATE HEAT SINK

#### LIMITING CONDITION FOR OPERATION

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3.7.5 The ultimate heat sink (UHS) shall be OPERABLE with:

- a. A minimum water level at or above 13.25 feet (E1 831.25 feet MSL) from the bottom of the UHS,
- b. An average water temperature of less than or equal to 90°F, and
- c. Two UHS cooling tower trains (2 cells per train).

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

- a. With the UHS inoperable as a result of level or temperature, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one UHS cooling tower train inoperable, restore both trains to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

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4.7.5.1 The UHS shall be determined OPERABLE at least once per 24 hours by verifying the average water temperature and water level to be within their limits.

4.7.5.2 The UHS cooling tower trains shall be demonstrated OPERABLE at least once per 31 days by verifying that each cooling tower fan operates for at least 15 minutes in both the slow and fast mode and at least once per 18 months by visually inspecting and verifying no abnormal breakage or degradation of the fill materials.

4.7.5.3 The UHS shall be determined OPERABLE at least once per 31 days by visually inspecting the UHS riprap for any abnormal degradation which might lead to blockage of the ESW pump suction.

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

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3.7.6 Two independent Control Room Emergency Ventilation Systems shall be OPERABLE.

APPLICABILITY: ALL MODES.

ACTION:

MODES 1, 2, 3 and 4:

With one Control Room Emergency Ventilation System inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6:

- a. With one Control Room Emergency Ventilation System inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE Control Room Emergency Ventilation System in the recirculation mode.
- b. With both Control Room Emergency Ventilation Systems inoperable, or with the OPERABLE Control Room Emergency Ventilation System, required to be in the recirculation mode by ACTION a., not capable of being powered by an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

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4.7.6 Each Control Room Emergency Ventilation System shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 84°F;
- b. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers of both the Filtration and Pressurization Systems and verifying that the Pressurization System operates for at least 10 continuous hours with the heaters operating;



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 25 TO FACILITY OPERATING LICENSE NO. NPF-30

UNION ELECTRIC COMPANY

CALLAWAY PLANT, UNIT 1

DOCKET NO. STN 50-483

1.0 INTRODUCTION

By letter dated January 29 as supplemented by letter dated March 27, 1987, Union Electric Company submitted a request for changes to Technical Specification 3/4.7.5 regarding the ultimate heat sink. The proposed changes would clarify the existing Action Statement to bring it into conformance with the Standard Technical Specifications and add a new Action Statement to account for the plant-specific design of the Ultimate Heat Sink (UHS) Cooling Tower.

2.0 EVALUATION

The present Action Statement states that with the Ultimate Heat Sink inoperable the licensee has 72 hours in which to restore operable status or be in hot standby within the next 6 hours and in cold shutdown within the following 30 hours. However, it is possible to read the Technical Specifications in such a way that as soon as any part of the UHS is declared inoperable, the Essential Service Water System would also have to be declared inoperable with its more restrictive Action Statements of Technical Specification 3.0.3 (Hot Standby within 6 hours, and Cold Shutdown within the following 30 hours).

The UHS cooling tower is sized for 200% of reactor heat dissipation. The cooling tower is divided into four cells with one fan assembly per cell. Two of the four cells are associated with one train of the Essential Service Water System and the other two cells are associated with the other train. Only two cells (one train of Essential Service Water) are required for safe shutdown. In the January 29 and March 27, 1987 letters, the licensee proposed an Action Statement for the Technical Specifications which would delineate this plant-specific design. The proposed Action Statement would allow one UHS Cooling Tower Train to be inoperable for 72 hours before the plant would be required to shut down. This change would permit one train of the UHS (and the associated train of ESW) to be inoperable without

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declaring the entire UHS inoperable. The Action Statement would be in conformance with other redundant system Action Statements (i.e., Essential Service Water, Component Cooling, Diesel Generators, etc.) when one train is declared inoperable. Thus, because of the unique design of the Callaway UHS cooling towers, the staff finds the proposed Action Statement for one inoperable Cooling Tower Train acceptable.

The March 27, 1987 letter, further clarified the amendment request. The licensee proposed an Action Statement for an inoperable UHS resulting from water level or temperature which is in conformance with the Standard Technical Specification for UHS and Technical Specification 3.0.3. This makes clear that if the cause of inoperability is excessive UHS temperature or inadequate water level, causes which affect the entire UHS, the time period associated with loss of both trains (6 hours to Hot Standby, 30 hours to Cold Shutdown) will apply. This clarification does not affect the notice of the proposed amendment as noticed. The staff finds this change acceptable.

Therefore, the staff finds the proposed changes to the Action Statement in Technical Specification LCO 3.7.5 as delineated in the March 27, 1987 letter acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 the issuance of this amendment.

### 4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: R. Giardina, SPLB  
T. Alexion, PDIII-3

Dated: 07/21/87