

September 9, 2003

Mr. Garry L. Randolph
Vice President and Chief Nuclear Officer
Union Electric Company
P.O. Box 620
Fulton, MO 65251

SUBJECT: CALLAWAY PLANT, UNIT 1 - ISSUANCE OF AMENDMENT RE: REVISION
OF TECHNICAL SPECIFICATIONS FOR MINIMUM USABLE VOLUMES FOR
THE DIESEL GENERATOR FUEL OIL STORAGE TANKS (TAC NO. MB9663)

Dear Mr. Randolph:

The Commission has issued the enclosed Amendment No. **156** to Facility Operating License No. NPF-30 for the Callaway Plant, Unit 1. The amendment consists of changes to the technical specifications (TSs) in response to your application dated June 2, 2003 (ULNRC-04854).

The amendment revises TS 3.8.3, Condition A to increase the specified minimum fuel oil inventories maintained in the fuel oil storage tanks for the diesel generators.

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

Sincerely,

/RA/

Brian Benney, Project Manager, Section 2
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosures: 1. Amendment No. **156** to NPF-30
2. Safety Evaluation

cc w/encls: See next page

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UNION ELECTRIC COMPANY

CALLAWAY PLANT, UNIT 1

DOCKET NO. 50-483

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 156
License No. NPF-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Union Electric Company (UE, the licensee) dated June 2, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's 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:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 156 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This amendment is effective as of its date of issuance, and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Stephen Dembek, Chief, Section 2
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: September 9, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 156

FACILITY OPERATING LICENSE NO. NPF-30

DOCKET NO. 50-483

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

REMOVE

3.8-19

INSERT

3.8-19

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 156 TO FACILITY OPERATING LICENSE NO. NPF-30
UNION ELECTRIC COMPANY
CALLAWAY PLANT, UNIT 1
DOCKET NO. 50-483

1.0 INTRODUCTION

By letter dated June 2, 2003, Union Electric Company (the licensee) requested changes to the Technical Specifications (TSs) for the Callaway Plant, Unit 1. The proposed TS change would modify the minimum fuel oil inventories maintained in the fuel oil storage tanks for the diesel generators (DGs). Currently, TS 3.8.3 requires a minimum usable fuel oil volume of 68,915 gallons to be maintained. The licensee proposed to change the minimum usable fuel oil volume to 69,300 gallons. Limiting Condition for Operation (LCO) 3.8.3, Condition A, is affected by the TS change.

2.0 REGULATORY EVALUATION

The current TS requirements on minimum fuel oil inventory are based on previous calculations that concluded a minimum volume of 68,915 gallons was needed for each of the DGs. The licensee assumed these fuel oil inventories based on limited operation of emergency core cooling system pumps during the first six days following a loss-of-coolant accident (LOCA). Recently, the licensee re-calculated the minimum fuel oil inventories for the DG fuel oil storage tanks. The results of the calculations indicated that the required minimum usable fuel oil in the fuel oil storage tanks is greater than that required by current TSs. Accordingly, the licensee requested a change to the operating license to increase the amount of diesel fuel oil to be kept in the storage tanks. Regulatory Guide 1.137, "Fuel Oil Systems for Standby Diesel Generators," describes the method for complying with the NRC regulations. The American National Standards Institute (ANSI) N195-1976 Standard, "Fuel Oil Systems for Standby Diesel-Generators," provides a method acceptable to the staff for complying with the pertinent requirements of General Design Criterion (GDC) 17.

3.0 TECHNICAL EVALUATION

3.1 Regulatory Requirements

GDC-17, "Electric Power Systems," of Appendix A to 10 CFR Part 50 requires that an onsite electric power system and an offsite electric power system be provided to permit functioning of structures, systems, and components important to safety. In addition, GDC-17 contains requirements concerning system capacity, capability, independence, redundancy, availability,

testability, and reliability. The onsite standby (alternating current [ac]) power system, powered by the DGs, supplies power to selected loads in the event of a loss of normal ac power supplies. The availability and reliability of the DGs is a major factor in ensuring acceptable plant safety.

3.2 TS Changes Proposed for Callaway

At Callaway, the fuel oil storage tanks are required to supply sufficient fuel oil to the DGs for their proper operation for a duration of seven days following a LOCA. LCO Condition A provides a volume range below 80,400 gallons, but above 68,915 for a period of 48 hours prior to restoring the tank volume to greater than 80,400 gallons. In this condition, the seven-day fuel oil supply for a DG is not available. However, the condition is restricted to fuel oil level reductions that maintain at least a six-day supply. The proposed TS change would require additional fuel oil to be stored in the DG fuel oil storage tanks, as was determined by the licensee's updated calculations. The proposed change would increase minimum fuel oil volume from 68,915 gallons to 69,300 gallons. Section 5.4, "Calculation of Fuel Oil Storage Requirements," of the ANSI N195-1976 Standard, states that fuel oil calculations shall be based on the assumption that the DG operates continuously for seven days at its rated capacity. The licensee stated that the original calculation for the LCO (6-day supply) capacity was obtained by dividing 80,400 by 7 and multiplying by 6. This does not properly account for the total unusable volume of 2840 gallons. New calculations, which account for only the usable volume of the fuel oil in the storage tank for the 6-day and 7-day supply, required a volume increase of 385 gallons in the specified 6-day supply in LCO 3.8.3, Condition A.

The staff has completed its review of the licensee's submittal and finds that the TS change will ensure the capability of the DGs to perform their safety function with the revised capacities specified for usable fuel. Therefore, the staff concludes that the proposed change to the fuel volumes in the DG fuel oil storage tanks meets the intent of GDC-17, and is acceptable.

3.3 Evaluation Conclusions

On the basis of its review, the staff concludes that the proposed TS change is acceptable. The basis for the staff's acceptance are that:

- The proposed change is justified by the licensee on the basis of technical information reviewed by the staff.
- The proposed change would improve the DG availability and capability.
- The proposed change meets the intent of GDC-17.

Therefore, the staff concludes that the proposed TS change is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Missouri State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (68 FR 43393). Accordingly, the 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 the amendment.

6.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Brian Benney, DLPM

Date: September 9, 2003

Callaway Plant, Unit 1

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