

Docket No.: STN 50-483

NOV 19 1985

Mr. D. F. Schnell
Vice President - Nuclear
Union Electric Company
P. O. Box 149
St. Louis, Missouri 63166

Dear Mr. Schnell:

Subject: Callaway Plant, Unit 1 - Amendment No. 9 to License NPF-30

The Commission has issued the enclosed Amendment No. 9 to Operating License NPF-30 for the Callaway Plant, Unit 1. The amendment consists of a change to the Technical Specifications in response to your application dated May 17, 1985. The amendment deletes the requirements for resistance testing of certain fuses whose function is to provide containment penetration conductor overcurrent protection, and it also deletes the list of containment penetration conductor overcurrent protective devices from the Technical Specifications.

The amendment approves modifications to Pages 3/4 8-16, 3/4 8-17, and B 3/4 8-3 of the Callaway Technical Specifications. The amendment also approves deletion of Table 3.8-1 (Pages 3/4 8-18/43) of the Callaway Technical Specifications.

A copy of the related Safety Evaluation is enclosed. The notice of issuance will be included in the Commission's next regular bi-weekly Federal Register Notice.

Sincerely,

(S)

B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

Enclosures:

1. Amendment No. 9 to NPF-30
2. Safety Evaluation Report

cc: See next page

LB#1/DL
TAlexion, mac
10/31/85

LB#1/DL
MRushbrook
10/31/85

LB#1/DL
PO'Connor
10/31/85

OELD
RPe
11/6/85

LB#1/DL
BJYoungblood
11/9/85

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P PDR

Mr. D. F. Schnell
Union Electric Company

Callaway Plant
Unit No. 1

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- 2 - Callaway Plant
Unit No. 1

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

NOV 19 1985

UNION ELECTRIC COMPANY

DOCKET NO. 50-483

CALLAWAY PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 9
License No. NPF-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Union Electric Company (the licensee), dated May 17, 1985, 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 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. 9, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. UE shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

(S)

B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

Attachment:
Change to the Technical
Specifications

Date of Issuance:

LB#1/DL
TAlexion:mac
10/31/85

LB#1/DL
MRushbrook
10/31/85

LB#1/DL
PO'Connor
10/31/85

OELD
RP
11/6/85

LB#1/DL
BJYoungblood
11/1/85

ATTACHMENT TO LICENSE AMENDMENT NO. 9

OPERATING LICENSE NO. NPF-30

DOCKET NO. STN 50-483

Revise Appendix A, as follows:

<u>REMOVE</u>	<u>INSERT</u>
3/4 8-16	3/4 8-16
3/4 8-17	3/4 8-17
B 3/4 8-3	B 3/4 8-3
3/4 8-18	-
3/4 8-19	-
3/4 8-20	-
3/4 8-21	-
3/4 8-22	-
3/4 8-23	-
3/4 8-24	-
3/4 8-25	-
3/4 8-26	-
3/4 8-27	-
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3/4 8-29	-
3/4 8-30	-
3/4 8-31	-
3/4 8-32	-
3/4 8-33	-
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3/4 8-35	-
3/4 8-36	-
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3/4 8-39	-
3/4 8-40	-
3/4 8-41	-
3/4 8-42	-
3/4 8-43	-

ELECTRICAL POWER SYSTEMS

3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

LIMITING CONDITION FOR OPERATION

3.8.4.1 All containment penetration conductor overcurrent protective devices whose circuit limiting fault current exceeds the penetration rating shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one or more of the above required containment penetration conductor overcurrent protective device(s) inoperable:

- a. Restore the protective device(s) to OPERABLE status or deenergize the circuit(s) by tripping the associated backup circuit breaker, or racking out or removing the inoperable circuit breaker within 72 hours, declare the affected system or component inoperable, and verify the backup circuit breaker to be tripped or the inoperable circuit breaker racked out, or removed, at least once per 7 days thereafter; the provisions of Specification 3.0.4 are not applicable to overcurrent devices in circuits which have their backup circuit breakers tripped, their inoperable circuit breakers racked out, or removed, or
- b. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.4.1 All containment penetration conductor overcurrent protective devices whose circuit limiting fault current exceeds the penetration rating shall be demonstrated OPERABLE:

- a. At least once per 18 months:
 - 1) By verifying that the 13.8 kV circuit breakers are OPERABLE by selecting, on a rotating basis, at least 10% of the circuit breakers, and performing the following:
 - a) A CHANNEL CALIBRATION of the associated protective relays,
 - b) An integrated system functional test which includes simulated automatic actuation of the system and verifying that each relay and associated circuit breakers and control circuits function as designed, and

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c) For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.
- 2) By selecting and functionally testing a representative sample of at least 10% of each type of lower voltage circuit breakers. Circuit breakers selected for functional testing shall be selected on a rotating basis. Testing of these circuit breakers shall consist of injecting a current in excess of the breakers nominal Setpoint and measuring the response time. The measured response time will be compared to the manufacturer's data to ensure that it is less than or equal to a value specified by the manufacturer. Circuit breakers found inoperable during functional testing shall be restored to OPERABLE status prior to resuming operation. For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.
- b. At least once per 60 months by subjecting each circuit breaker to an inspection and preventive maintenance in accordance with procedures prepared in conjunction with its manufacturer's recommendations.

ELECTRICAL POWER SYSTEMS

BASES

3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

Containment electrical penetrations and penetration conductors are protected by either deenergizing circuits not required during reactor operation or by demonstrating the OPERABILITY of primary and backup overcurrent protection circuit breakers during periodic surveillance.

The Surveillance Requirements applicable to lower voltage circuit breakers provide assurance of breaker reliability by testing at least one representative sample of each manufacturer's brand of circuit breaker. Each manufacturer's molded case and metal case circuit breakers are grouped into representative samples which are then tested on a rotating basis to ensure that all breakers are tested. If a wide variety exists within any manufacturer's brand of circuit breakers, it is necessary to divide that manufacturer's breakers into groups and treat each group as a separate type of breaker for surveillance purposes.

A list of containment penetration conductor overcurrent protective devices whose circuit limiting fault current exceeds the penetration rating, with information of location and size and equipment powered by the protected circuit, shall be available at the plant site in accordance with Section 50.71(c) of 10 CFR Part 50. The addition or deletion of any containment penetration conductor overcurrent protective device shall be made in accordance with Section 50.59 of 10 CFR Part 50.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

NOV 19 1985

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 9 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 May 17, 1985, Union Electric Company (the licensee) requested an amendment to Facility Operating License No. NPF-30 for operation of the Callaway Plant in Callaway County, Missouri.

The amendment approves modifications to Pages 3/4 8-16, 3/4 8-17, B 3/4 8-3, and the amendment approves deletion of Table 3.8-1 (Pages 8-18/43) of the Callaway Technical Specifications (TS). The amendment deletes the periodic functional (resistance) testing of the fuses for containment penetration conductor overcurrent protection. The licensee contends that periodic resistance measurement is not a practical means of determining a fuse's condition to assure that its ability to clear a fault has not deteriorated. Rather, the resistance verification is performed by the vendor during the manufacturing process to assure proper construction - i.e., correct amount of fuse elements, correct thickness of elements, and detection of poor or no solder joints. Therefore, the licensee asserts that the periodic non-destructive resistance testing of fuses only generates data and is not indicative of performance capability.

The amendment also deletes both Table 3.8-1 which provides information on the location, size and equipment protected by the containment penetration conductor overcurrent protective devices, and its references throughout the TS. As an alternative, the licensee proposes to administratively control the list of containment penetration conductor overcurrent protective devices at the plant site through appropriate plant procedures. Any future modifications to the list would be made in accordance with Section 50.59 of 10 CFR Part 50. The licensee maintains that deletion of this list from the TS shall in no way degrade compliance with the operability of the containment penetration conductor overcurrent protective devices.

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2.0 EVALUATION

As a result of recent TS changes which contain similar requests from several licensees and applicants, the staff has reevaluated the requirement for measuring fuse resistance in the Standard Technical Specifications by considering the following factors:

- (1) Periodic field measurement of fuse resistance does not provide any meaningful assurance on the fault interrupting capability of the fuse.
- (2) Periodic removal of a fuse from its holder for test purposes merely compromises its integrity.
- (3) Operational experience does not indicate that a current limiting fuse ever becomes less protective over its life.

The staff concluded that the test requirement is technically ineffective and unnecessary. Finally, the staff recommended that the periodic surveillance requirement for resistance measurement of fuses be deleted from the Standard Technical Specifications and further, recommended that any required fuse inspection and maintenance should be performed through the quality assurance program and appropriate plant procedures.

We have reviewed the following listed TS changes which were requested by the licensee:

	<u>TS</u>	<u>Provision</u>	<u>Changes</u>
1.	LC0*	3.8.4.1	Delete reference to Table 3.8-1 and add definition of the protective devices.
2.	SR**	4.8.4.1	Delete reference to Table 3.8-1 and add definition of the protective devices.
3.	SR	4.8.4.1.a.1)b)	Delete reference to Table 3.8-1
4.	SR	4.8.4.1.a.3)	Delete a paragraph on fuse testing.
5.	Bases	3/4.8.4	Delete reference to fuse and outline the plant procedures and future modification.
6.	Table	3.8-1	Delete Table 3.8-1 (Page 3/4 8-18/43).

The staff finds the proposed TS changes are consistent with the staff position and recommendation stated above. Therefore, the staff finds the subject request to be acceptable.

* limiting condition for operation

** surveillance requirement

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in 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 change in the types or significant increase in the amounts 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 Section 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

We have 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:

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DISTRIBUTION:

(AMENDMENT NO. 9 - CALLAWAY)

DATED: NOV 19 1985

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