

Docket No.: STN 50-483

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

APR 04 1985

Dear Mr. Schnell:

Subject: Callaway Plant, Unit 1 - Amendment No. 6 to License NPF-30

The Commission has issued the enclosed Amendment No. 6 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 February 12, 1985 to allow for a delay of 6 months in the due dates of the first three tendon surveillances. Deferral of the Callaway surveillance is necessary to allow your contractor, INRYCO, Inc., to assist Alabama Power Company in evaluating anomalies recently found in the containment post tensioning system of the Farley Unit 2 plant.

The amendment approves a modification to Page 3/4 6-8 of the Callaway Technical Specifications consisting of a revision to surveillance requirement 4.6.1.6.1.

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

Sincerely,

~~ORIGINAL SIGNED BY:~~

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

Enclosures:

1. Amendment No. 6 to NPF-30
2. Safety Evaluation Report

cc: See next page

DISTRIBUTION:

See attached page

LB#1:DL  
TAlexion:kab  
03/12/85

LB#1:DL  
MRushbrook  
03/15/85

LB#1:DL  
PO'Connor  
03/25/85

OELD  
RPerlman  
03/27/85

LB#1:DL  
BJYoungblood  
03/25/85

AD:1:DL  
INovak  
03/23/85

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PDR ADDCK 05000483  
P PDR

CALLAWAY

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DISTRIBUTION: (AMENDMENT NO. 6 - CALLAWAY)

DATED: APR 04 1985

Docket File

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

UNION ELECTRIC COMPANY

DOCKET NO. 50-483

CALLAWAY PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 6  
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 February 12, 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 a change 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. 6, 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

**SPECIAL AGENT BY:**

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

Attachment:  
Change to the Technical  
Specifications

Date of Issuance: **APR 04 1985**

LB#1:DL *[Signature]*  
TAlexion:kab  
03/22/85

LB#1:DL *[Signature]*  
MRushbrook  
03/25/85

LB#1:DL *[Signature]*  
PO'Connor  
03/25/85

OELD  
RPerl *[Signature]*  
03/27/85

LB#1:DL *[Signature]*  
BJYoungblood  
03/25/85

AD:DL *[Signature]*  
TNovak  
03/27/85

ATTACHMENT TO LICENSE AMENDMENT NO. 6

OPERATING LICENSE NO. NPF-30

DOCKET NO. STN 50-483

Revise Appendix A, as follows:

REMOVE

3/4 6-8

INSERT

3/4 6-8

## CONTAINMENT SYSTEMS

### CONTAINMENT VESSEL STRUCTURAL INTEGRITY

#### LIMITING CONDITION FOR OPERATION

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3.6.1.6 The structural integrity of the containment vessel shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.6.

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

ACTION:

- a. With more than one tendon with an observed lift-off force between the predicted lower limit and 90% of the predicted lower limit or with one tendon below 90% of the predicted lower limit, restore the tendon(s) to the required level of integrity within 15 days and perform an engineering evaluation of the containment and provide a Special Report to the Commission within 30 days in accordance with Specification 6.9.2 or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With any abnormal degradation of the structural integrity other than ACTION a. at a level below the acceptance criteria of Specification 4.6.1.6, restore the containment vessel to the required level of integrity within 72 hours and perform an engineering evaluation of the containment and provide a Special Report to the Commission within 15 days in accordance with Specification 6.9.2 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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4.6.1.6.1 Containment Vessel Tendons. The containment vessel tendons' structural integrity shall be demonstrated at the end of 1.5, 3.5, and 5.5 years following the initial containment vessel structural integrity test and at 5-year intervals thereafter. The tendons' structural integrity shall be demonstrated by:

- a. Determining that a random but representative sample of at least 11 tendons (4 inverted U and 7 hoop) each have an observed lift-off force within predicted limits for each. For each subsequent inspection one tendon from each group may be kept unchanged to develop a history and to correlate the observed data. If the observed lift-off force of any one tendon in the original sample population lies between the predicted lower limit and 90% of the predicted lower limit, two tendons, one on each side of this tendon should be checked for their lift-off forces. If both of these adjacent tendons are found to be within their predicted limits, all three tendons should be restored to the required level of integrity. This single deficiency may be considered unique and acceptable. Unless there is abnormal degradation of the containment vessel during the first three inspections, the sample population for subsequent inspections shall include at least 6 tendons (3 inverted U and 3 hoop);





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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 6 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 February 12, 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 a modification to Page 3/4 6-8 of the Callaway Technical Specifications (TS) consisting of a revision to surveillance requirement 4.6.1.6.1.

2.0 EVALUATION

The requested change involves an additional six months in the due date of the initial one year containment tendon surveillance and a resultant step change of six months in the following two surveillance dates. Specifically, tendon surveillance will be made at the end of 1.5, 3.5 and 5.5 years following the initial containment vessel structural integrity test instead of 1, 3, and 5 years as stipulated in the original technical specification. The reason for requesting such a change is due to the unavailability of the services of INRYCO, the inspection contractor for Union Electric. The services of INRYCO are more pressing at Alabama Power's Farley Unit 2, where tendon anchor head failures have been discovered, and prompt resolution is needed.

The licensee made a safety evaluation of the proposed change and concluded that the Callaway plant can be safely operated with the revised tendon surveillance schedule and the requested license amendment does not present a significant hazard. The bases for such a conclusion as given by the licensee are design conservatism, inspections conducted during tendon installation, field anchor head materials used, field visual inspection conducted recently and satisfactory results from the initial inservice tendon surveillance of similar containments in other plants.

The staff has reviewed the licensee's safety evaluation and has concluded that the requested change will not affect the safe operation of the Callaway plant and is acceptable. In addition, the staff has observed from the information provided in the SNUPPS and Callaway FSAR that the ground water level at the plant site is normally below the tendon gallery floor level and there is no possibility of water intrusion into the vertical tendon sheathing from the top of the containment which has a hemispherical dome. As a result the anomalies that occurred in tendon systems at other plants are less likely to occur at Callaway.

### 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:  
C. P. Tan, SGEB  
T. W. Alexion, LB#1

Dated: APR 04 1985