

October 22, 1991

Docket No. STN 50-483

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

Dear Mr. Schnell:

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SUBJECT: EXEMPTION TO 10 CFR PART 50, APPENDIX J, SECTION III.D.1.(a)
(TAC NO. M80398)

The Commission has issued the enclosed Exemption for the Callaway Plant, Unit 1, from a certain requirement of Appendix J to 10 CFR Part 50, in response to Item 4 of your letter dated March 15, 1991.

The Exemption removes the requirement that the third test of each set of three Type A tests be conducted when the Callaway facility is shutdown for the 10-year plant inservice inspection.

The Exemption is enclosed. A copy of the Exemption is being filed with the Office of the Federal Register for publication.

Sincerely,
original signed by

M. D. Lynch, Sr. Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

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Mr. D. F. Schnell
Union Electric Company

Callaway Plant
Unit No. 1

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of
UNION ELECTRIC COMPANY
(Callaway Plant,
Unit No. 1)

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Docket No. STN 50-483

EXEMPTION

I.

The Union Electric Company (the licensee), is the holder of Facility Operating License No. NPF-30 which authorizes operation of the Callaway Plant, Unit No. 1. The license provides, among other things, that it is subject to all rules, regulations and orders of the Nuclear Regulatory Commission (the Commission) now and hereafter in effect.

The facility consists of a pressurized water reactor located at the licensee's site in Callaway County, Missouri.

II.

In its letter dated March 15, 1991, the Union Electric Company (the licensee) applied for an amendment to Operating License NPF-30 to change certain provisions of the Callaway Technical Specifications (TSs). The licensee in this letter also requested a number of partial exemptions from the Commission's regulations. The subject exemption (Item 4 of the letter cited above) is from a requirement in Appendix J to 10 CFR Part 50 which requires that certain surveillance tests be conducted during the same refueling outage.

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The specific requirement involved in the subject exemption request is contained in Section III.D.1.(a) of Appendix J to 10 CFR Part 50, which states in part that "... a set of three Type A tests shall be performed, at approximately equal intervals during each 10-year service period. The third test of each set shall be conducted when the plant is shut down for the 10-year plant inservice inspection." Type A tests are defined in Section II.F of Appendix J as those "... tests intended to measure the primary reactor containment overall integrated leakage rate... at periodic intervals..." The 10-year inservice inspection (ISI) is that series of inspections performed every 10 years in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a. The time required to perform the containment integrated leakage rate tests (CILRTs) necessitates that they be performed during refueling outages. The time interval between CILRTs should be about 40 months based on performing three such tests at approximately equal intervals during each 10-year service period. Since refueling outages do not necessarily occur coincident with a 40-month interval, a permissible variation of 10 months (i.e., a 25 percent variation) is typically authorized in the technical specifications issued with an operating license to permit flexibility in scheduling the CILRTs.

The proposed revision to the Callaway TSs associated with the licensee's request for an exemption in Item 4 of the letter dated March 15, 1991, would remove the requirement in TS 4.6.1.2.a that the Type A tests be conducted at 40 ± 10 month intervals during each 10-year service period. However, this

request does not require an exemption from the regulations in that the proposed text in Insert B of the licensee's letter cited above effectively incorporates the content of Section III.D.1.(a) of Appendix J regarding the frequency of the CILRTs. Accordingly, this portion of the licensee's request need not be considered in this exemption. The proposed revision to TS 4.6.1.2.a will be considered as a separate licensing action.

This TS also requires that the third test of each set of three Type A tests be conducted during the shutdown for the 10-year plant inservice inspection. This particular TS incorporates the requirements of Section III.D.1.(a) of Appendix J as cited above regarding the coupling of the 10-year CILRT with the 10-year IST. This portion of the proposed revision to TS 4.6.1.2.a will be considered as a separate licensing action after completion of the pending exemption request.

With respect to the subject exemption request, the NRC staff notes that the first and second CILRTs of the set of three tests for the first 10-year cycle for Callaway were conducted in May 1987 and October 1990, respectively. This represents testing intervals of 40 and 41 months from the initial preoperational CILRT in January 1984. The third of the first set of three CILRTs is scheduled for September 1993 which will be 35 months after the preceding test. This testing schedule for the first 10-year service period will thereby satisfy the scheduling requirements of Section III.D.1.(a) of Appendix J as well as the requirements of Callaway TS 4.6.1.2.a.

The licensee is presently operating on an 18-month fuel cycle which presents a potential concern for the scheduling requirements of Section III.D.1.(a) of Appendix J for future CILRTs. The problem may arise because

the 10-year cycle is not divisible into equal intervals of 40 months, with a permissible variation of 10 months, as presently required by Callaway TS 4.6.1.2.a. The CIRLT presently scheduled for September 1993 will occur within 4 months of the first 10-year cycle ending in January 1994.

Accordingly, the NRC staff concludes that this deviation from the 10-year cycle ending in January 1994 is not significant in terms of complying with the scheduling requirements of Section III.D.1.(a).

With respect to the requirement in Section III.D.1.(a) that the third Type A test of each set of three be conducted when the plant is shutdown for the 10-year plant inservice inspections, the licensee states in its letter dated March 15, 1991, that it is performing the inservice volumetric, surface and visual examinations of components and system pressure tests in accordance with 10 CFR 50.55a(g)(4) throughout the 10-year inspection intervals. The major portion of this effort is presently being performed every 18 months during the refueling outages.

There is no benefit to be gained by the coupling requirement cited above in that elements of the Callaway ISI program are conducted throughout the 10-year cycles at the 18-month refueling outages rather than at the end of the 10-year cycles. Consequently, the subject coupling requirement offers the Callaway facility no benefit either to safety or to economical operation of the facility.

Moreover, each of these two surveillance tests (i.e., the Type A tests and the 10-year ISI program) is independent of the other and provides assurances of different plant characteristics. The Type A tests assure the required leak-tightness to demonstrate compliance with the guidelines of

10 CFR Part 100. The 10-year ISI program provides assurance of the structural integrity of the structures, systems, and components as well as verifying operational readiness of pumps and valves in compliance with 10 CFR 50.55a. There is no safety-related concern necessitating their coupling in the same refueling outage. Accordingly, the staff finds that the subject exemption request meets the underlying purpose of the rule [10 CFR 50.12(a)(2)(ii)].

On this basis, the NRC staff finds that the licensee has demonstrated that there are special circumstances present as required by 10 CFR 50.12(a)(2). Further, the staff also finds that the uncoupling of the Type A tests from the 10-year ISI program will not present an undue risk to the public health and safety.

III.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest and hereby grants the following partial exemption with respect to a requirement of 10 CFR Part 50, Appendix J, Section III.D.1(a):

The Callaway Plant, Unit 1 Technical Specifications may be revised to eliminate the requirement that the third Type A test of each set of 3 Type A tests be conducted in conjunction with the 10-year inservice inspection.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (56 FR 43945). Accordingly, based upon the environmental assessment, the

Commission has determined that the granting of the subject exemption will not have a significant effect on the quality of the human environment.

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

original signed by

Bruce A. Boger, Director
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 22nd day of October 1991.

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