



January 19, 1995

Donald F. Schnell  
Senior Vice President  
Nuclear

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station P1-137  
Washington, D.C. 20555

Gentlemen:

ULNRC-03131  
TAC NO. M86837

**DOCKET NUMBER 50-483**  
**CALLAWAY PLANT**  
**ROD CONTROL SYSTEM FAILURE AND WITHDRAWAL OF ROD**  
**CLUSTER CONTROL ASSEMBLIES, 10 CFR 50.54(f)**

- References: 1. NRC Generic Letter 93-04 dated  
June 21, 1993  
2. ULNRC-2832 dated August 5, 1993  
3. ULNRC-2857 dated September 17, 1993  
4. NRC Request for Additional  
Information letter dated  
December 15, 1994

Pursuant to the requirements of 10 CFR 50.54(f), the NRC issued Reference 1 to all licensees with the Westinghouse Rod Control System (except Haddam Neck) for action and to all other licensees for information. References 2 and 3 provided Union Electric's 45-day and 90-day responses, respectively, as required by Reference 1.

In Reference 4, the NRC noted their approval, by letter dated November 10, 1994 to the Westinghouse Owners Group (WOG), of the following documents: (1) WCAP-13864, Rev. 1, "Rod Control System Evaluation Program," (2) Westinghouse Technical Bulletin NSD-TB-94-05-R0, "Rod Control-CRDM Timing Change," and (3) "WOG Recommended Rod Control System Surveillance Test." Reference 4 also requested a commitment to implement the current order timing modification and the new current order surveillance test, as described in the approved WOG documents above, prior to startup from the next refueling outage. In response, Union Electric will implement the following during Refuel 7 (March-May 1995):

1. The current order timing modification defined in Westinghouse Technical Bulletin NSD-TB-94-05-R0 will be completed by repositioning diodes on the Westinghouse Solid State Rod Control System Logic Cabinet Slave Cyclor Decoder Cards. This will implement a revised Westinghouse standard timing applicable to all models of rod drive mechanisms in the L-106 family.

The post-modification acceptance tests (slave cyclor logic traces with the reactor trip breakers open to verify that the timing sequences have been properly revised and current traces with the trip breakers closed to verify that proper rod motion occurs) will be performed in general conformance with the test outline in Attachment 2 of the Technical Bulletin. The current traces will be taken in conjunction with rod drop time testing and will record three steps of insertion from the fully withdrawn position and then three steps of withdrawal for all of the control and shutdown rods.

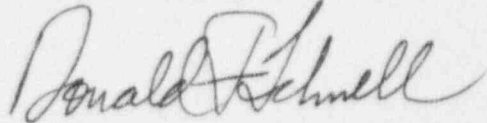
While the intent is to take current traces for each of the 53 rods, obtaining this information for one rod in each group is sufficient to ensure that the modification was implemented correctly. If unanticipated problems in testing prevent taking current traces for all 53 rods, the outage will not be extended if current traces for at least one rod in each group have been taken.

2. Prior to startup from every refueling outage after Refuel 7, a current order surveillance test will be performed to obtain current traces for one rod in each group of control and shutdown banks for three steps of insertion and three steps of withdrawal in conjunction with rod drop time testing. This will be similar to Test C discussed in the "WOG Recommended Rod Control System Surveillance Test". No slave cyclor logic traces, as taken during the post-modification testing discussed above, will be routinely taken as part of this surveillance. As stated in the introduction to Test C in the "WOG Recommended Rod Control System Surveillance Test", measuring the current profile to one rod in each group is

sufficient to verify the current timing and regulation and satisfy the requirement to detect single failures in the Rod Control System that would corrupt the current orders without affecting rod movement.

The NRC will be notified in writing after we have implemented the current order timing modification and the current order surveillance test. Should you have any questions on the above, please contact us.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Donald F. Schnell". The signature is fluid and cursive, with the first name "Donald" being more prominent.

Donald F. Schnell

GGY/plr

STATE OF MISSOURI     )  
                              )     S S  
CITY OF ST. LOUIS     )

Donald F. Schnell, of lawful age, being first duly sworn upon oath says that he is Senior Vice President-Nuclear and an officer of Union Electric Company; that he has read the foregoing document and knows the content thereof; that he has executed the same for and on behalf of said company with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By Donald F. Schnell  
Donald F. Schnell  
Senior Vice President  
Nuclear

SUBSCRIBED and sworn to before me this 19<sup>th</sup> day  
of January, ~~1994~~ 1995 (BP)

Barbara J. Pfaff  
BARBARA J. PFAFF  
NOTARY PUBLIC — STATE OF MISSOURI  
MY COMMISSION EXPIRES APRIL 22, 1997  
ST. LOUIS COUNTY

cc: T. A. Baxter, Esq.  
Shaw, Pittman, Potts & Trowbridge  
2300 N. Street, N.W.  
Washington, D.C. 20037

M. H. Fletcher  
Professional Nuclear Consulting, Inc.  
18225-A Flower Hill Way  
Gaithersburg, MD 20879-5334

L. Robert Greger  
Chief, Reactor Project Branch 1  
U.S. Nuclear Regulatory Commission  
Region III  
801 Warrenville Road  
Lisle, IL 60532-4351

Bruce Bartlett  
Callaway Resident Office  
U.S. Regulatory Commission  
RR#1  
Steedman, MO 65077

L. R. Wharton (2)  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
1 White Flint, North, Mail Stop 13E21  
11555 Rockville Pike  
Rockville, MD 20852-2738

Manager, Electric Department  
Missouri Public Service Commission  
P.O. Box 360  
Jefferson City, MO 65102