

UNION ELECTRIC COMPANY

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ST. LOUIS, MISSOURI

DONALD F. SCHNELL
VICE PRESIDENT

May 7, 1984

MAILING ADDRESS:
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Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, DC 20555

ULNRC-814

Dear Mr. Denton:

DOCKET NUMBER 50-483
UNION ELECTRIC COMPANY
CALLAWAY PLANT, UNIT 1
FIRE PROTECTION SYSTEM STATUS

Fire protection at the Callaway Plant involves an in-depth, integrated system of design separation, noncombustible materials, automatic and manual suppression, heat and smoke detection, alarms, barriers, training, and administrative controls. Callaway FSAR Site Addendum Section 9.5.1.6 states that the fire protection program will be implemented before fuel loading. To a large degree the total fire protection system has been installed and satisfactorily tested at the Callaway Plant. A few construction and testing activities related to fire protection at Callaway are not complete. We have reviewed the outstanding fire protection items and have concluded that they should not be a restraint to licensing.

In the area of passive fire protection, incomplete items are: (1) final installation, inspection, and rework of wall and floor penetration seals, conduit seals, cable tray covers; and (2), application of fire proofing material on recently installed supports and on small areas of structural steel. By May 15, 1984, the penetration seals will be complete in all safety-related buildings except for some areas in the Auxiliary and Control Buildings. Similarly, incomplete conduit seals, cable tray covers, and applications of fire proofing material will be limited to a few areas in the Auxiliary and Control Buildings. All safety-related areas that have incomplete passive fire protection items are protected by the fire detection and suppression systems as described in the FSAR. Upon licensing, the Technical Specifications for compensatory actions (i.e. fire watches or fire watch patrols) will be implemented. Compliance with the Technical Specifications will ensure that the integrated fire protection program is not degraded while the installation and inspection of passive fire protection items are in progress.

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In the area of active fire protection, all systems have been or will be satisfactorily tested by May 15, 1984 with two exceptions. The first involves line-type thermal detectors used inside containment. These detectors will be proven prior to fuel load with the exception of a portion installed on the cable trays on the control rod drive mechanism (CRDM) platform. It is not practical to install and test this portion until after fuel load and replacement of the reactor vessel head. Technical Specification compensatory measures (i.e. inspections or temperature monitoring) will be invoked until testing is complete. It should also be noted that Union Electric is re-evaluating the need for the thermal detectors in the CRDM trays and a design change in the future is possible.

The second incomplete active protection measure is successful testing of the Halon systems in some plant areas as described below. The north electrical penetration room (fire area A-18 of FSAR Section 9.5B) is being used as a data acquisition center for required thermal and dynamic testing. As such the room cannot be sealed and tested for a sustained Halon concentration. This area has early warning fire detection and manual fire fighting with hose stations and portable fire extinguishers. Technical Specification provisions (i.e. fire watch patrol) will be invoked until this testing is complete.

The south electrical penetration room (fire area A-17 of FSAR Section 9.5B) has been successfully Halon tested with the exception of the upper-most area inside a vertical electrical cable chase. In this area the Halon concentration has not sustained the required amount (5 percent minimum for 10 minutes). Similarly in the control room (fire area C-27), the upper-most portion of the chase leading to underfloor trenches has not maintained the required concentration. Various design alterations are being considered and retests are underway. It is possible that a resolution to this problem will not be found by May 15, 1984. In this case, alternative fire protection measures as discussed above for the north penetration room will be employed.

In summary, the extensive Callaway fire protection program is essentially complete. The exceptions discussed above will be vigorously pursued to acceptable resolutions. In all cases, compensatory measures will be in effect such that the fire protection system is not degraded. With the exception of the north electrical penetration room (fire area A-18), all the above items will be completed prior to exceeding five percent power. Completion of sealing and Halon testing of the north electrical penetration room will be completed after the 100% power data has been taken for thermal and dynamic testing. This is expected to be completed prior to January, 1985. Union Electric

Mr. Harold R. Denton

May 7, 1984

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believes that fuel loading, startup testing, and plant operation should proceed while these matters are being resolved.

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" and last name "Schnell" clearly distinguishable.

Donald F. Schnell

DJW/lw

cc: W. L. Forney, NRC Region III
B. H. Little, NRC Resident Inspector
Missouri Public Service Commission
J. J. Holonich, NRC-NRR

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 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
Vice President
Nuclear

SUBSCRIBED and sworn to before me this 7th day of May, 1984.

Barbara J. Pfaff
BARBARA J. PFAFF
NOTARY PUBLIC, STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 22, 1985
ST. LOUIS COUNTY