

UNION ELECTRIC COMPANY  
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ST. LOUIS, MISSOURI

DONALD F. SCHNELL  
VICE PRESIDENT

October 15, 1982

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Mr. R. L. Spessard, Director  
Division of Project and Resident Programs  
US Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

ULNRC- 587

Dear Mr. Spessard:

INSPECTION REPORT NO. 50-483/82-10

This letter is in response to your letter of September 16, 1982 which transmitted the report of the inspection conducted during the period of August 1, 1982 to August 31, 1982. Our responses to the items of noncompliance and other findings are presented below in the order listed within the body of inspection report number 50-483/82-10.

None of the material in the inspection report or in this response is considered proprietary by Union Electric Company.

(50-483/82-10-01) SEVERITY LEVEL V VIOLATION

10 CFR 50, Appendix B, Criterion XVI, states, "Measures shall be established to assure that conditions adverse to quality, such as.... defective material and equipment....are promptly identified and corrected."

SNUPPS Standard Quality Assurance Manual, Section 10.1.1 states, in part, "....controls are provided to assure that conditions adverse to quality are promptly identified, reported and corrected."

Contrary to the above, the inspector found that three penetration modules in electrical penetration assembly 2ZNE268 which exhibited cracks in the potting compound had not been identified or reported.

Response

Corrective Action Taken And The Results Achieved:

A potential problem with cracking of penetration potting compound surfaced at the Wolf Creek Plant over a year ago. A Wolf Creek non-conformance report had been issued regarding this and other problems

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with electrical penetration assemblies. Having received this information, we elected to defer action until Wolf Creek had completed their review so that we could structure an inspection based on the types of problems discovered at Wolf Creek.

When cracks in the potting compound on 2ZNE268 (500 MCM penetration) were identified by the NRC inspector, Non-conformance Report 2SN-6399-E was written and forwarded to Bechtel for evaluation and resolution.

A visual inspection for similar cracking of potting compound on other penetration modules at Callaway indicates that the cracks are limited to the 500 MCM modules. Representative modules with potting compound cracks of this type have been subjected to x-ray analysis and helium leak testing. The tests demonstrated that the cracks are limited to the conductor extension area with no penetration into the pressure boundary module seal; hence, pressure integrity is not affected by the observed cracks.

Corrective Action To Be Taken To Avoid Further Noncompliance:

Nonconformance reports will be prepared for the 500 MCM modules with potting compound cracks and dispositioned use-as-is in accordance with existing Callaway procedures.

The Wolf Creek penetration review has been recently completed. Callaway will review these results and perform any additional inspections necessary.

The Date When Full Compliance Will Be Achieved:

Daniel will be in full compliance by April 29, 1983.

(50-483/82-10-02) SEVERITY LEVEL V VIOLATION

10 CFR 50, Appendix B, Criterion V, states, "Activities affecting quality shall be prescribed by documented instructions, procedures or drawings...and shall be accomplished in accordance with these instructions, procedures or drawings."

Daniel International Procedure WP-303, Revision 12, dated June 22, 1982, Installation of Wire and Cable, states in section 3.27, "Coiled cables shall not be bent in excess of the minimum prescribed bend radii" and in section 3.15, "Caution must be observed to prevent exceeding the minimum bend radius for any particular type cable...".

Contrary to the above, the inspector found that the minimum bend radius had been violated during or subsequent to the installation of the following cables:

- a. Coiled cable 1ALJ05BD in conduit 1J091 located in the auxiliary feed system valve compartment,
- b. Coiled cable 1ACI09CA in the backup compressed gas accumulator tank area,
- c. Cable in conduit 1UJ1D at the entry to cable tray 1UJ307,
- d. Cable in Motor Control Center NG02B cubicle GF5, and
- e. Cable in Motor Control Center NG04D at breaker DPJE01B.

Response

Corrective Action Taken And The Results Achieved:

Delcon has investigated the specific cables listed in Item 2 of the Appendix - Notice of Violation. The results are as follows:

- a. There is no cable identified as 1ALJ05BD. Delcon investigated cable 1AIJ05BD which is on Elevation 2000 of the Auxiliary Building. The investigation revealed that the minimum bend radius violation was past the point where the cable will be cut off when it is terminated. This deficiency was documented on 2SD-8360-E.
- b. There is no cable identified as 1ACI09CA. Delcon investigated cable 1ALI09CA which is on Elevation 2013 of the Auxiliary Building. A minimum bend radius violation was found on this cable. This deficiency was documented on 2SD-8184-E.
- c. There is no conduit identified as 1UJ1D. Delcon investigated the cable in conduit 1U3J1D which attaches to tray 1U3J07. A minimum bend radius violation was found on this cable. This deficiency was documented on 2SN-6413-E.
- d. Delcon investigated the cables in Motor Control Center NG02B cubicle GF5. Cable 4GSG09BA was found to have a minimum bend radius violation. This deficiency has been documented on 2SD-7929-E.
- e. Delcon has investigated the minimum bend radius violation in NG04D. The investigation revealed that the violation was caused by improper coiling of 4JEG01BD cable. However, the bend radius violation was past the point where the cable will be cut off when it is terminated. This deficiency was documented on 2SD-8356-E.

Additional cables listed in Electrical Item 6 under "DETAILS" were also investigated. The results are as follows:

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- d. 2) Delcon investigated the cable in conduit 4U3B3B. Cable 4EGG18CD was found to have a minimum bend radius violation. This deficiency has been documented on 2SN-6415-E.
- 3) Delcon investigated cable in conduit 4J3B1F. The investigation revealed that although the cable was near the minimum bend radius, it was not exceeded.

Corrective Action To Be Taken To Avoid Further Noncompliance:

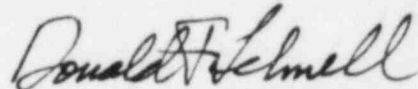
Delcon will initiate a program for training of craft cable pulling and terminating personnel which emphasizes the requirements of minimum bend radius specifications. In addition, a walkdown inspection of all safety-related exposed cable will take place. Any deficiencies noted will be documented and corrected.

The Date When Full Compliance Will Be Achieved:

Delcon will be in full compliance by November 8, 1982.

If you have any question regarding this response or if additional information is required, please let me know.

Very truly yours,

  
Donald F. Schnell

RMD/jds

cc: Mr. H. M. Wescott, NRC Region III  
NRC Resident Inspector, Callaway Plant  
Missouri Public Service Commission