

APPENDIX A

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-285/88-09

Operating License: DPR-40

Docket: 50-285

Licensee: Omaha Public Power District (OPPD)
1623 Harney Street
Omaha, Nebraska 68102

Facility Name: Fort Calhoun Station (FCS)

Inspection At: FCS, Blair, Nebraska

Inspection Conducted: February 22-26, 1988

Inspector:

T. P. Mullikin for
R. P. Mullikin, Project Engineer, Reactor
Project Section B

2-4-88
Date

Approved:

T. F. Westerman
T. F. Westerman, Chief, Projects Section B

3-4-88
Date

Inspection Summary

Inspection Conducted February 22-26, 1988 (Report 50-285/88-09)

Areas Inspected: Routine, unannounced inspection of penetration fire barriers.

Results: Within the area inspected, one potential violation was identified (nonfunctional penetration fire barriers protecting safety-related areas, paragraph 2).

DETAILS1. Persons ContactedOPPD

L. Kusek, Supervisor, Operations (Acting Plant Manager)
T. Patterson, Supervisor, Technical
B. Hansher, Licensing Engineer
J. Lechner, Plant Engineer
S. Crites, Engineer
S. Gambhir, Section Manager, Generating Station Engineering
A. Christensen, Health Physicist

NRC

J. Milhoan, Director, Division of Reactor Safety

Those listed above attended the meeting on February 25, 1988.

The NRC inspector also contacted other plant personnel including operators, technicians, and administrative personnel.

2. Penetration Fire Barriers

On February 23, 1988, the NRC inspector discovered air flow through two 4-inch electrical conduits in each of the two safety-related battery rooms. The conduits travel through the 3-hour rated fire wall separating each battery room from its respective switchgear area. The magnitude of the air flow was such that it was evident to the NRC inspector that no internal conduit seals existed. The conduits run through Wall Penetration Nos. 54-S-1 and 54-S-2 in Battery Room 1, and Nos. 55-S-3 and 55-S-4 in Battery Room 2. The conduits end in open air in the battery rooms and in a cabinet in the switchgear areas.

The Fort Calhoun Station (FCS) Fire Hazards Analysis (FHA) separates the plant into separate fire areas. The FHA states that the battery rooms are separated from each other and other areas of the plant by barriers having a minimum fire rating of 3 hours inclusive of all penetrations and openings.

The FCS Updated Safety Analysis Report (USAR) states, in part, that the design basis of the fire protection systems includes commitment to APCS Branch Technical Position 9.5-1, Appendix A, dated May 1, 1976. Appendix A states, in part, that floors, walls and ceilings enclosing separate fire areas should have minimum 3-hour rating. Penetrations in these fire barriers, including conduits and piping, should be sealed or closed to provide fire resistance rating at least equal to that barrier itself.

Technical Specifications (TS) 3.15 states, in part, that penetration fire barriers shall be verified to be functional (intact) at least once per 18 months by a visual inspection. Since no internal conduits seals were visible to the NRC inspector in the four battery room conduits, the licensee's quality control (QC) organization was contacted to determine how these seals are inspected. QC stated that these conduits seals are not inspected because only the seals inside of conduits 2 inches or larger which do not extend 5 feet into the fire area on one side are inspected. In addition, FCS Maintenance Procedure MP-FP-2, "Fire Barrier Penetration Seals," provide only for sealing the inside of the type of conduits described by QC.

The NRC inspector informed the licensee that, according to their commitment to Appendix A, all penetration fire barriers should be sealed. Subsequently, the licensee instituted the TS-required fire watch in all safety-related areas since there was no documentation to show how many conduits that breach fire areas are internally sealed.

TS 2.19 states, in part, that all penetration fire barriers protecting safety-related areas shall be functional (intact). Therefore, the fire barriers between Battery Room 1 (Fire Area 37) and the East Switchgear Area (Fire Area 36A), and Battery Room 2 (Fire Area 38), and the West Switchgear Area (Fire Area 36B) were nonfunctional. This is considered to be an apparent violation of NRC requirements (285/8809-01). In addition, there is no assurance that other fire barriers throughout the plant are functional.

3. Exit Meeting

The NRC inspector met with Mr. L. T. Kusek and other members of the licensee staff on February 25, 1988. At this meeting, the NRC inspector summarized the scope of the inspection and findings.

APPENDIX B

PROPOSED ENFORCEMENT CONFERENCE AGENDA

OMAHA PUBLIC POWER DISTRICT

MARCH 15, 1988

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| I. Introduction and Purpose of Meeting | L. J. Callan |
| ° Lack of Internal Conduit Fire Seals | |
| II. Licensee Presentation | OPPD Staff |
| III. NRC Comments | L. J. Callan |
| IV. Enforcement Policy | D. A. Powers |
| V. Licensee Response | OPPD Staff |
| VI. Closing Comments | L. J. Callan |