

June 29, 1990  
LIC-90-0522

Omaha Public Power District  
1623 Harney Omaha, Nebraska 68102-2247  
402/536-4000

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Station P1-137  
Washington, DC 20555

REFERENCES: 1. Docket No. 50-285  
2. Letter from NRC (S. J. Collins) to OPPD (W. G. Gates) dated April 6, 1990  
3. Letter from OPPD (W. G. Gates) to NRC (Document Control Desk) dated May 7, 1990 (LIC-90-0366)  
4. Letter from NRC (S. J. Collins) to OPPD (W. G. Gates) dated May 21, 1990

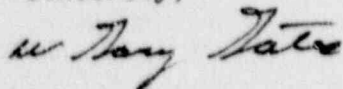
Gentlemen:

SUBJECT: Revised Response to Notice of Deviation (NRC Inspection Report 50-285/90-02)

Omaha Public Power District (OPPD) received the subject inspection report (Reference 2) which identified one violation regarding raw water pump discharge check valves and one deviation regarding installation of cables. OPPD responded to these items with Reference 3. OPPD subsequently determined that the corrective actions in the response to the Notice of Deviation should be revised. The planned revision was discussed with the Senior Resident Inspector and acknowledged by NRC in Reference 4. Attached please find OPPD's revised response to the subject Notice of Deviation. This revision updates the status of the corrective actions, and removes reference to preparation of a Safety Analysis for Operability (SAO) as it has been determined that an SAO is not necessary. Changes are denoted by a vertical line in the right margin.

If you should have any questions, please contact me.

Sincerely,



W. G. Gates  
Division Manager  
Nuclear Operations

WGG/sel

Attachment

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PDR ADOCK 05000285  
Q PDC

c: LeBoeuf, Lamb, Leiby & MacRae  
A. Bournia, NRC Project Manager  
R. D. Martin, NRC Regional Administrator, Region IV  
P. H. Harrell, NRC Senior Resident Inspector

EO 11

## RESPONSE TO NOTICE OF DEVIATION

Based on the results of an NRC inspection conducted January 16 through February 28, 1990, a deviation of your commitments made to the NRC was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1989) (Enforcement Policy), the deviation is listed below:

### Inadequate Installation of Cables

Figure 8.5-1, "Cable and Conduit Schedule Notes," of the Updated Safety Analysis Report states, in part, that the installation of electrical cables shall meet the following requirements:

- \* Paragraph 20.c states, in part, that the fill in trays for 125-Vdc and 120-Vac cables shall generally not exceed a maximum of 50 percent.
- \* Paragraph 22 states, in part, that prefixed (safety-related) cables may be routed in raceways containing nonprefixed (nonsafety-related) cables provided the cables are separated by a metallic barrier.
- \* Paragraph 18 states, in part, that control and instrument cables shall be tied down in a neat configuration after installation in trays.

In deviation from the above, the licensee failed to properly install cables in Trays 5-4A and 5-4B in that examples of improperly installed cables were identified by the inspector that did not meet the installation criteria identified above (285/9002-03).

### OPPD Response:

#### 1. The Reason for the Deviation, if Admitted

OPPD admits the Deviation occurred as stated. The deviation occurred for two reasons:

- a. Inadequate instructions in the standard construction procedure to the craftsmen and Quality Control inspectors during the installation of cables, resulting in cables not being tied down.
- b. Inadequate procedures for the preparation of modification packages to address and analyze the impact of tray loading (percent fill) and safety and non-safety related cable separation using a metallic barrier. This resulted in tray overfills which render some of the existing metallic barriers ineffective.

#### 2. The Corrective Steps Which Have Been Taken and the Results Achieved

- a. Cable tray fill including modifications has been reviewed against Updated Safety Analysis Report (USAR) criteria to identify overfilled cable trays. An inspection has been completed of accessible (not requiring scaffold) safety related tray subsections where fill in excess of the criteria has been identified. The inspection provided supporting information for the Engineering Analysis discussed in Item 2.C below, regarding the current configuration of cables.
- b. Tray sections 5-4A and 5-4B have been reworked to neatly tie down cables and remove crossovers, where accessible in the pyrocrete enclosures.

Response to Notice of Deviation (Continued)

- c. OPPD has prepared an Engineering Analysis (EA-FC-90-076) to justify the existing cable tray configuration (tray fill and power cable derating). This analysis discusses updated criteria for determination of acceptable cable tray loading.
- d. OPPD has updated Engineering Instruction GEI-9 - Electrical System Interactions, which deals with cable separation and tray loading, to require specific analysis for each modification which involves the installation or change in routing of cables in the Fort Calhoun Station.
- e. OPPD has updated construction procedure ETS-10 - Cable Installation Specification, which deals with cable installation, to provide better instructions to the craftsmen and Quality Control inspectors on cable installation in the cable tray system.

3. The Corrective Action Steps Which Will be taken to Avoid Further Deviations

Engineering Analysis EA-FC-90-076 will be used as the basis for a future revision to the USAR which will address criteria for determining acceptable cable tray loading.

4. The Date When Full Compliance Will be Achieved

OPPD is currently in full compliance based on the Engineering Analysis criteria for tray loading.