

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

Report: 50-285/31-34

Docket: 50-285

License: DPR-40

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

Facility Name: Fort Calhoun Station, Unit 1

Inspection at: Fort Calhoun Station, Blair, Nebraska, and
Jones St. Offices, Omaha, Nebraska

Inspection conducted: December 14-17, 1981

Inspector:

J. P. Jaudon
J. P. Jaudon, Reactor Inspector, Systems and Technical
Section

1/15/82
Date

Approved:

R. E. Hall
R. E. Hall, Chief, Systems and Technical Section

1/15/82
Date

Inspection Summary

Inspection Conducted December 14-18, 1981 (Report 50-285/81-34)

Areas Inspected: Routine, unannounced inspection of licensee action taken relative to previous inspection findings and inspection of design changes. The inspection involved 27 inspector-hours by one NRC inspector.

Results: Within the two areas inspected, one apparent violation was identified (violation - failure to follow procedure regarding internal design change reports - paragraph 3.c).

DETAILS

1. Persons Contacted

Omaha Public Power District

- D. Dale, Quality Control Inspector
- J. Fisicaro, Supervisor, Administrative Services, Fort Calhoun Station (FCS)
- J. Gass, Training Supervisor
- G. Gates, Operations Supervisor
- L. Gundrum, Senior Mechanical Engineer
- R. Johnson, Shift Supervisor
- *W. C. Jones, Division Manager, Production Operations
- B. Livingston, Supervisor, Administrative Services, Generating Station Engineering (GSE)
- K. Miller, Test Engineer
- *K. J. Morris, Manager, Administrative Services
- *T. Patterson, Licensing Administrator
- *S. Stevens, Manager, Fort Calhoun Station
- *P. Surber, Acting Section Manager, GSE

The NRC inspector also contacted other plant personnel including administrative, clerical, engineering, and operations personnel.

*Denotes presence at the exit interview conducted December 17, 1981.

2. Licensee Action on Previous Inspection Findings

(Open) Unresolved Item (8115-01): This item was unresolved because of the large backlog of design changes, many of which were duplications, as listed on the licensee's bimonthly report. The NRC inspector found that the licensee had taken action to eliminate duplicate items on the design change report, but that this corrective action had not been completed.

This item remains open.

(Closed) Open Item (8115-02): This item was open pending completion of licensee action to revise licensee Procedure G-21 to reflect which licensee group issued the status report on design changes. The NRC inspector found that licensee Procedure G-21, Revision 12, "Station Modification Control," had been issued September 14, 1981. This procedure revision correctly identified Scheduling and Budgets as the licensee organization responsible for the status report on design changes.

This item is closed.

(Closed) Unresolved Item (8115-03): This item was unresolved pending licensee action to assure that the test section of licensee Forms FC-145 was completed correctly. The NRC inspector reviewed approximately

20 Forms FC-145 for pipe joints worked during the recent refueling outage. All the records checked were found to have the test sections completed.

This item is closed.

(Open) Unresolved Item (8115-04): This item was unresolved pending evaluation of licensee action to reorganize and to apply additional personnel in the area of drawing update. The NRC inspector found that the licensee had reorganized drafting personnel so that all of them reported to a single supervisor within Generating Station Engineering (GSE). Additionally, the NRC inspector found that the number of people actually engaged in drafting had essentially doubled over the last six months, and that an additional increase of three positions was authorized for January 1, 1982. Licensee representatives stated that they anticipated having these new drafting positions filled by March 1982. The NRC inspector noted that the backlog of drawing revisions still existed, and that the licensee was not yet able to meet his own requirement to update drawings in six weeks after modification completion. The NRC inspector concluded, however, that the licensee was taking committed action to address this problem, and that progress was being made. Paragraph 3 of this report addresses another aspect of drawing revision and update.

This item remains open.

3. Design Changes

The purpose of this inspection was to verify that design changes and modifications were accomplished in conformance with 10 CFR 50.59 and Technical Specifications (Chapter 5). This inspection was a continuation of the inspection of design changes reported in NRC Inspection Reports 50-285/81-15 and 50-285/81-26. This report of the inspection of design changes is subdivided into six categories: procedure, safety analysis, design change backlog, records, drawing update, and a summary.

a. Procedure

The NRC inspector reviewed licensee Procedure G-21, Revision 10 (9/14/81), "Station Modification Control." This procedure had been revised just prior to a refueling outage. The NRC inspector noted, among salient features of the procedure revision, that it structured a close cooperation between the staffs of GSE and the plant. By interview, the NRC inspector found that personnel from both GSE and the plant believed the goal of cooperation between their organizations had been achieved. Procedure G-21 required, for each significant modification, there be assigned a planner and a design/field engineer from GSE and an operations engineer from the plant. The NRC inspector also noted that Procedure G-21

assigned the planner responsibility for assuring that planning documents were prepared with consideration for limiting radiation exposure to "as low as is reasonably achievable." Since personnel assigned as planners are normally engineers in GSE, their background and experience vary. The NRC inspector expressed concern that there had been no training program that would provide a minimum baseline of capability in this area. The NRC inspector also noted that Procedure G-21 only addressed fire hazard analysis of design changes from a planning perspective and was silent to it during the design phase. By interview, the NRC inspector concluded that fire hazard analysis did play a part in the design change and review process. The NRC inspector expressed concern that this review was not specified in Procedure G-21 until the design change had been reviewed, approved, and was in the implementation stage.

b. Safety Analysis

The NRC inspector reviewed safety analyses for several design changes. It was noted that in several older safety analyses the basis for determining that the change did not constitute an unreviewed safety question was not clearly recorded. Although this problem was less evident in safety analyses which had been completed more recently, the sample reviewed was not large enough to assure the licensee's safety analyses were uniformly acceptable. From interviews, the NRC inspector concluded that engineers who prepared safety analyses were not as familiar with 10 CFR 50.59 as should be expected. The NRC inspector expressed concern to licensee management that this was a possibly deficient area. Additional safety evaluations will be reviewed on a subsequent inspection. This is an open item. (8134-02)

c. Design Change Backlog

The NRC inspector reviewed the licensee's status report of outstanding design changes. Procedure G-21 requires that this report be issued at intervals not to exceed 60 days. The last report found to have been issued was dated August 31, 1981. Licensee representatives stated that the next report would be issued in January 1982. 10 CFR 50, Appendix B, Criterion III requires that there be measures established for the identification and control of design interfaces. 10 CFR 50, Appendix B, Criterion V requires that activities affecting quality be prescribed by procedure and accomplished in accordance with said procedures. Thus, the failure to issue the status report as required by licensee Procedure G-21 is an apparent violation of 10 CFR 50, Criterion V. (8134-01) The NRC inspector was informed by licensee representatives that the decision not to issue the design change report had been made so that personnel involved in issuing this report could be utilized to track open jobs during the 1981 refueling outage.

d. Records

The NRC inspector found that there were not yet any records of completed design changes closed out under the revised Procedure G-21. Records of four design changes which were in process were reviewed, and no discrepancies were noted in these. Completed records of design changes will be reviewed at a future inspection. This is an open item. (8134-03)

e. Drawing Update

The NRC inspector found that the licensee had instituted a program to assure that, after completion of a modification, revised piping and instrument drawings (P&IDs) and selected electro-mechanical drawings (EMs) were available in the control room prior to system startup. At the time of the inspection, this method was in use, but it had not yet been documented in licensee procedures. The NRC inspector reviewed a draft procedure (G-47) which, when issued, would describe the use of "interim" P&IDs and EMs. The NRC inspector reviewed the control room P&ID drawings. All were plastic covered, and all were larger than the 11"x17" P&IDs previously used by the licensee, thus, improving readability. Licensee representatives stated that all of these P&IDs, including the "interim" drawings, which reflected recent modifications, had been independently verified (i.e., walked down). Operators interviewed expressed the conviction that the new P&IDs were accurate and more useable than the previous set had been. The NRC inspector confirmed, from senior licensee representatives both on site and at GSE, that it was an internal commitment to have revised P&IDs issued prior to post modification startup of affected systems. Documentation of this requirement in licensee procedures is considered to be an open item. (8134-04).

f. Summary

The NRC inspector concluded that the licensee had taken significant steps to improve control of the design change process since the previous inspection (50-285/81-15). While it was evident that all steps had not yet been completed, it appeared that the rate of progress to date has been consistent with licensee commitments.

4. Exit Interview

An exit interview was conducted December 17, 1981, with those Omaha Public Power District personnel denoted in paragraph 1 of this report. At this meeting, the scope of the inspection and the findings were summarized.