

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-285/89-45 Operating License: DRP-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 and
Professional Service Industries (PSI), Omaha, Nebraska

Inspection Conducted: October 30 through November 3, 1989

Inspector:

A. Barnes
L. D. Gilbert, Reactor Inspector, Materials
and Quality Programs Section, Division of
Reactor Safety

11-9-89
Date

Other

Accompanying

Personnel: P. H. Harrell, Senior Resident Inspector, FCS (Assisted during
inspection at PSI on October 31, 1989)

Approved:

A. Barnes
I. Barnes, Chief, Materials and Quality
Programs Section, Division of Reactor Safety

11-9-89
Date

Inspection Summary

Inspection Conducted October 30 through November 3, 1989 (Report 50-285/89-45)

Areas Inspected: Routine and reactive, unannounced inspection of licensee
action on previous inspection findings and followup of previously identified
radiographic examination concerns regarding Professional Service Industries (PSI).

Results: The actions by the licensee on the previous inspection findings were considered to be adequate. PSI, a contractor of OPPD for radiographic examination services, has made programmatic improvements that were unsolicited by OPPD; however, it was noted that their 10 CFR Part 21 program is outdated. A review of the licensee followup actions regarding PSI and the radiographic examination concerns indicated a weakness in the vendor approval process when a vendor was removed for cause.

DETAILS

1. Persons Contacted

OPPD

- *K. J. Morris, Division Manager, Nuclear Operations
- *W. G. Gates, Executive Assistant to the President
- *G. Peterson, Manager, Fort Calhoun Station (FCS)
- *R. Jaworski, Manager, Station Engineering
- *S. Ferguson, Manager, Nuclear Construction
- *P. Sepcenko, Supervisor Outage Projects
- *R. C. DeMeulmeester, Supervisor Operations
- *D. W. Dale, Supervisor Quality Control
- *J. L. Dyer, Senior Quality Control Inspector
- *W. W. Orr, Manager, Quality Assurance/Quality Control
- *R. Short, Supervisor Special Services
- *K. R. Henry, Lead Systems Engineer
- *J. Key, Supervisor System Engineer
- *T. J. McIvor, Manager, Nuclear Projects
- *J. Nguyen, Quality Assurance Engineer
- *D. Matthews, Supervisor Station Licensing
- *C. F. Simmons, Station Licensing Engineer
- W. Bateman, Procurement Quality Assurance Supervisor

Professional Service Industries (PSI)

- C. D. Davis, Quality Assurance Administrator, Corporate Office
- K. R. Fogleman, Division Manager, NDE Services, Omaha Office

NRC

- *R. E. Farrell, Senior Resident Inspector, FSV
- *T. Reis, Resident Inspector

The inspectors also interviewed other licensee employees during the inspection.

*Denotes attendance at exit interview conducted on November 3, 1989.

2. Licensee Action on Previous Identified Items (92702)

- a. (Closed) Violation (285/88529-II.H.2) (Deficiency 8529/2.5-1): Inadequate welding, preparation, and inspection associated with the replacement of Valve MS-100. This item was previously inspected and accepted in NRC Inspection Report 50-285/88-25 with the exception of the generic corrective action. The inspector reviewed the generic corrective actions that were addressed by the licensee in OPPD Memorandum PED-SSE-89-283S of April 24, 1989. This item is closed.

- b. (Closed) Violation (285/8840-01): Nondestructive examination requirements not specified prior to repair welding. The inspector verified that the corrective actions committed to by the licensee have been completed. These actions included the incorporation of nondestructive examination requirements for excavations into the modification package, rework and repair of those welds which were not properly examined prior to repair welding, and the development of a general weld repair procedure. This item is closed.
- c. (Closed) Violation (285/8843-02): Flare bevel welds were accepted which did not meet final weld configuration acceptance criteria. The inspector verified that the corrective actions committed to by the licensee have been completed. These actions included the additional training of inspectors, the reinspection of all flare bevel welds on Modification MR-FC-88-60, the rework of 12 flare bevel welds which were undersized, and a sampling of other work in-progress. This item is closed.

3. Followup of Radiographic Examination Concerns (92701)

NRC regional management requested a followup at the Omaha Division of PSI in regard to previously identified radiographic examination concerns at FCS.

a. Visit to PSI

During the visit to the Omaha Division of PSI, the inspectors reviewed the appropriate documentation to determine that:

- o A Quality Assurance (QA) Manual had been approved and issued which describes the method of implementation of the 18 criteria contained in Appendix B of 10 CFR Part 50.
- o The requirements of 10 CFR Part 21 were being adequately implemented.
- o Internal QA audits were being performed to verify compliance with the QA program.

The inspectors reviewed selected portions of the documentation listed below to verify compliance with the appropriate regulations and requirements:

- o Procedure 88-617, "PSI Procedure Adopted Pursuant to NRC Regulation 10 CFR Part 21," dated March 25, 1988; and
- o Procedure QC-CRN-1, "Control and Reporting of Nonconformances," dated September 21, 1979.

During review of the documents listed above, the inspectors identified the following concerns:

- o PSI did not fully comply with the posting requirements contained in 10 CFR Part 21.6. Specifically, PSI had not posted Section 206 of the Energy Reorganization Act of 1974 and PSI Procedure 88-617 adopted pursuant to 10 CFR Part 21. In addition, the inspectors noted that the 10 CFR Part 21 regulation posted was out of date. The posted regulation was the 1979 revision; whereas, the current revision of 10 CFR Part 21 is 1988.
- o Procedure 88-617 had not been updated to reflect the changes in the current 10 CFR Part 21 regulation or the current PSI organization.

The personnel at PSI stated that the posting would be updated as soon as a current revision of 10 CFR Part 21 and Section 206 of the Energy Reorganization Act could be obtained. The PSI personnel also stated that Procedure 88-617 would be updated and posted as soon as possible.

The PSI QA program was defined in Procedure QA-M-1, "Corporate Quality Assurance Manual," dated October 12, 1988. The following sections of the QA program were selected and reviewed by the inspectors.

- o Section 5.0, "Instructions, Procedures, and Drawings;"
- o Section 6.0, "Document Control;"
- o Section 12.0, "Control of Measuring and Testing Equipment;"
- o Section 16.0, "Corrective Action;" and
- o Section 18.0, "Audits."

During review of the selected samples of the QA program, the inspectors noted no problems. It appeared that PSI had established and implemented a program to adequately address the 18 criteria contained in Appendix B to 10 CFR Part 50.

The inspectors also verified that the auditing requirements of the QA program were being performed by reviewing an internal corporate QA audit that had been performed at the Omaha Division of PSI during January 22-23, 1989.

In addition to the QA program, the inspectors reviewed the following:

- o Procedure No. QC-RT-1, "Radiographic Inspection," Revision 19 dated March 2, 1989;

- o Procedure No. QC-PQ-1, "Personnel Qualifications", Revision 19 dated February 9, 1989;
- o Certification of the Level II and Level III radiographic examination personnel;
- o Document control for Procedure QC-RT-1; and
- o Calibration of densitometers.

Minor discrepancies were noted in implementation of the calibration program as specified in Appendix III of Procedure QC-RT-1. Specifically, the two densitometers used by PSI, although calibrated within the past 90 days, were not consistently calibrated within the 90 day period specified in the procedure during the past year. In addition, the film strip used for calibration did not contain the lower limit of the 0.3 to 3.9 density range specified by the procedure but started at a density of 0.4. The corporate QA Administrator, who was also the Level III that approved the procedure, stated that the 0.3 lower limit of the density range specified for calibration was not necessary. The QA Administrator stated that the procedure would be revised to permit a density of 0.4 for calibration and also made a commitment to audit the calibration program during the first quarter of 1990.

b. Licensee Followup to PSI

The licensee initiated action for a 10 CFR Part 21 evaluation regarding the discrepancies identified in the radiographic examination performed by PSI on safety-related components. The licensee also removed PSI from the Routine Suppliers List (RSL) as an Approved Vendor based on the initiation of a 10 CFR Part 21 evaluation concerning the quality of the radiographs provided by PSI. On completion of the 10 CFR Part 21 evaluation, the licensee reinstated PSI on the RSL as an approved vendor. The basis for approval was stated as "The investigation indicates that the radiographic examination technique employed by PSI at Fort Calhoun Station would not create a substantial safety hazard and is not reportable per 10CFR21." The basis for approval of PSI did not address the root cause but only the 10 CFR Part 21 evaluation conclusion. This was discussed with QA management personnel and determined to be a weakness of the procedure for approval and audit of vendors, QAM-31. The inspector was informed that the licensee has made improvements in the QC program for surveillance of contractors performing radiographic examination to preclude similar radiographic examination problems. Also, the inspector noted during the visit to PSI that radiographic examination program improvements had been incorporated into their procedures. Furthermore, the inspector was informed that PSI does not have a current contract with FCS for radiographic examination services and the triennial audit of PSI is due in 1990.

No violations or deviations were identified during this inspection.

4. Exit Interview

An exit interview was conducted on November 3, 1989, with those personnel denoted in paragraph 1 in which the inspection findings were summarized. At the exit interview, Mr. Orr made a commitment to revise the QA Manual (QAM) before December 4, 1989, and incorporate requirements for reinstatement of approved vendors after removal from the Routine Suppliers List. This commitment was met by the licensee on November 6, 1989, when the revision to QAM-31 was approved. No information was presented to the inspector that was identified by the licensee as proprietary.