

ENCLOSURE 1

NOTICE OF VIOLATION

Omaha Public Power District
Fort Calhoun Station

Docket No.: 50-285
License No.: DPR-40

During an NRC inspection conducted on August 25 through October 5, 1996, 2 violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. Appendix B of 10 CFR Part 50 Criterion V, states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstance and shall be accomplished in accordance with these instructions, procedures, or drawings.

Standing Order SO-G-91, "Control and Transportation of Combustible Material," Revision 7, Step 5.4.1.A, requires, in part, that combustibles that are temporarily retained to support an ongoing work activity be minimized and should be limited to 5 gallons of Class B material.

Contrary to the above, on September 20, 1996, the inspectors identified that approximately 150 gallons of epoxy coating and 30 gallons of resin hardener had been left unattended inside the intake structure in close proximity to the diesel driven fire pump.

This is a Severity Level IV Violation (285/96010-01) (Supplement I).

- B. Appendix B of 10 CFR Part 50 Criterion V states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstance and shall be accomplished in accordance with these instructions, procedures, or drawings.

Radiation Protection Procedure RP-207, "Personnel Monitoring and Decontamination," Revision 6, Step 7.5.1A, requires, in part, that personnel found to have detectable contamination on skin or clothing shall be documented on FC-RP-207-2, "Personnel Contamination Log."

Contrary to the above, on September 20, 1996, the inspectors identified that an auxiliary operator had been contaminated while performing rounds and that the contamination was not logged or properly turned over to the oncoming radiation protection technician.

This is a Severity Level IV violation (285/96010-03) (Supplement IV).

The NRC has concluded that information regarding the reason for Violation 285/96010-03, the corrective actions taken and planned to correct the violation and prevent recurrence and the date when full compliance will be achieved, are already adequately addressed on the

docket in the subject inspection report. However, you are required to submit a written statement or explanation following the instructions below, if the description therein does not accurately reflect your corrective actions or your position.

Pursuant to the provisions of 10 CFR 2.201, Omaha Public Power District is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Arlington, Texas
this 25th day of October 1996

ENCLOSURE 2

U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket No: 50-285
License No: DPR-40

Report No: 50-285/96-10

Licensee: Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 399, Hwy. 75 - North of Fort Calhoun
Fort Calhoun, Nebraska

Facility: Fort Calhoun Station

Location: Blair, Nebraska

Dates: August 25 through October 5, 1996

Inspectors: W. Walker, Senior Resident Inspector
V. Gaddy, Resident Inspector
M. Miller, Senior Resident Inspector
F. Brush, Resident Inspector

Approved: W. D. Johnson, Chief, Project Branch B

Attachment: Supplemental Information

EXECUTIVE SUMMARY

Fort Calhoun Station NRC Inspection Report 50-285/96-10

This routine announced inspection included aspects of licensee operations, engineering, maintenance and plant support. The report covers a 6-week period of resident inspection.

Operations

- The conduct of operations was professional and safety conscious. However, a need for continued improvement in self-checking, procedural guidance and differentiation between similar components was identified when a relay specialist inadvertently opened two 345kV circuit breakers in the switchyard. Opening additional breakers could have resulted in a plant trip (Section 01.2).
- A noncited violation was identified when operations personnel failed to ensure the accuracy of a computer generated tagout. The licensee identified the condition and took prompt and appropriate corrective action (Section 04.1).
- The inspectors noted that the licensee had made continued progress in reducing the number of open condition reports and was effectively addressing immediate safety concerns. Also, adverse conditions were properly prioritized and associated action items were being completed within the targeted due dates (Section 07.2).

Maintenance

- The maintenance activities and surveillances observed were conducted in a controlled and professional manner (Sections M1.1 and M1.2).
- A violation was identified regarding improper storage of epoxy paint, a combustible, in the intake structure (Section M4).

Engineering

- The licensee demonstrated low sensitivity to effects of degraded equipment, in that an evaluation to determine operability with respect to seismic qualification, had not been performed for diesel generator undervoltage relays installed in a door with a broken latch (Section E1.1).

Plant Support

- A violation was identified regarding failure of a radiation protection technician to properly document that an auxiliary operator was contaminated while taking logs (Section R1.1).
- Emergency planning personnel used an emergency planning drill to provide effective operations staff and emergency response organization training (Section P5).

Report Details

Summary of Plant Status

The plant began this inspection period operating at 100 percent power. On September 21, a reduction to 70 percent power was conducted and on September 28, power was further reduced to 45 percent. The power reductions were in preparation for the refueling outage and were implemented to reduce radiation levels during the outage. The reactor was shut down on October 5, 1996, for a scheduled refueling outage.

I. Operations

O1 Conduct of Operations

O1.1 General Comments (71707)

The inspectors frequently observed ongoing plant operations. In general, the conduct of operations was professional and safety-conscious. The inspectors noted effective implementation of management performance expectations during most observations. Specific events and noteworthy observations are detailed in the sections below.

O1.2 Inadvertent Tripping of 345 kV 3451 Breakers

a. Inspection Scope (71707)

The inspectors reviewed the circumstances surrounding the inadvertent tripping of two 345 kV Circuit 3451 breakers by substation personnel during a routine relay calibration.

b. Observations and Findings

On September 4, 1996, a substation protection relay specialist entered the switchyard to calibrate protective relays on 345 kV Circuit 3451 (Substation 3451 Sioux City Raun Line). The calibration was being conducted as an approved preplanned switchyard activity. Relay calibration activities had begun on June 20, and were conducted periodically until the scheduled completion date of October 5. The activity had been coordinated with Operations and control room personnel were aware of the calibrations.

The individual correctly isolated the primary protective relays for one of the circuits to be worked. However, during the course of the calibration, the individual inadvertently installed a test instrument plug into the wrong location and tripped open 345 kV Circuit Breaker 3451-2. Unaware of the error, the individual continued and installed a second test instrument plug into another wrong location causing 345 kV Circuit Breaker 3541-4 to trip open. Operation of the breaker was not audible inside the 3451 control building where the individual was working. There was no audible indication in the control room that Breaker 3451-2 had tripped. However, when Breaker 3451-4 was tripped open there was an audible alarm in the control room. After the second breaker was inadvertently tripped, substation personnel working in another part of the switchyard noticed that the breakers had opened and notified the relay specialist. The relay

specialist then notified the control room that he had tripped the breakers. The relay specialist then removed the test plugs and restored the proper breaker alignment.

This event was significant because if the relay specialist had opened additional breakers he could have disconnected the plant from the electrical grid (loss of offsite power) and caused a plant trip.

Based on the significance of the event the licensee performed a human performance enhancement system evaluation to determine why the relay specialist opened the two breakers. The licensee stopped all work in the switchyard until this evaluation was completed.

The evaluation determined that the cause was a failure to apply self-checking. Contributing factors were complacency in performing repetitive tasks, inadequate procedural guidance, and inadequate differentiation between similar components. Corrective actions taken included implementation of a peer checking program for substation personnel that perform work in the switchyard and identification and demarcation of components which through their manipulation or incorrect use could cause a loss of offsite power or a plant trip.

c. Conclusion

Personnel error resulted in a near miss when a relay specialist inadvertently opened two 345kV Circuit 3451 breakers in the switchyard. Opening additional breakers could have caused a plant trip. A lack of self-checking, complacency in performing repetitive tasks, inadequate procedural guidance, and inadequate differentiation between similar components were identified as causing and contributing to the breakers being inadvertently opened.

O2 Operational Status of Facilities and Equipment

O2.1 Engineered Safety Feature System Walkdown (71707)

The inspectors used Inspection Module 71707 to walk down accessible portions of the following engineered safety feature systems:

- Containment Integrity
- Emergency Diesel Generator 1

The inspectors noted that the material condition of the equipment was good. Housekeeping was good. All supports and seismic restraints were properly anchored and in good condition.

During the containment integrity walkdown, the inspectors noted that the nitrogen gas pressure in Electrical Penetration A-11 was below that required by the procedure. The

procedure indicated that the pressure should be above 20 psig. The as-found pressure was approximately 18 psig. The inspectors informed the licensee and the gas pressure was increased to above 20 psig.

The inspectors asked if the low pressure had any effect on containment integrity. The licensee indicated that the 20 psig requirement was purely administrative and its only function was to protect components in the penetration from corrosion. The gas pressure had no effect on containment integrity. Other minor discrepancies were brought to the licensee's attention and corrected.

O4 Operator Knowledge and Performance

04.1 Equipment Tagout Error

a. Inspection Scope (71707)

The inspectors followed up on an event in which the tagout prepared by operations personnel directed that the wrong fuse be pulled to isolate control power.

b. Observations and Findings

On September 24, 1996, electrical maintenance personnel were tagging out Valve HCV-507A (Waste Gas Vent Header Containment Outlet Isolation Valve). The valve was being tagged out in preparation for a relay replacement. While isolating control power, electrical maintenance personnel pulled the power fuse to Valve HCV-507B instead of Valve HCV-507A.

The licensee determined that the computerized tagout sheet specified that the fuse for Valve HCV-507B be pulled. Although the computerized tagout data base was the source of the error, operations personnel maintained a hard copy of the fuse list and this list contained the correct information. Failing to ensure the accuracy of the tagout is a violation of 10 CFR 50, Appendix B, Criterion V. This licensee-identified and corrected violation is being treated as a noncited violation consistent with Section VII.B.1 of the NRC Enforcement Policy (NCV 285/96010-01).

The licensee investigated and determined several errors during this evolution. In addition to the incorrect information found in the computerized data base, the licensee identified other barriers that were breached that should have prevented the wrong fuse from being pulled. The licensee determined that the operator that prepared the tagout should have verified it against the fuse list, that the senior reactor operator that verified the tagout should also have verified it against the fuse list, and that maintenance personnel did not verify the fuse to be pulled with the drawing. If this had been done, maintenance personnel would have identified the error prior to pulling the fuse because correct drawings were located in the work instructions.

The licensee immediately corrected the data base. Operations and maintenance personnel were counseled on the importance of using controlled documents when performing and reviewing tagouts.

The inspectors asked how the accuracy of the computerized data base was maintained. The licensee stated that prior to adding components to the list, an evaluation was performed to ensure all information was correct. In this incident, this evaluation was inadequate because it did not ensure accurate information was added to the list.

c. Conclusions

A lack of attention to detail coupled with an incorrect computerized tagout data base resulted in operations personnel specifying that the wrong fuse to isolate control power be pulled. A lack of attention to detail also caused maintenance personnel to miss that the wrong fuse had been specified. The licensee's identification and implementation of corrective actions were satisfactory.

07 Quality Assurance in Operations

07.1 Assessment of Licensee Activities by Third Party (71707)

On September 9, the inspector reviewed the Institute of Nuclear Power Operations evaluation report on the Fort Calhoun Station. No safety significant issues were identified which would require followup by the NRC.

07.2 Corrective Action System (71707)

During this inspection, the inspectors reviewed the licensee's corrective action program. This program was controlled by Standing Order SO-R-2, "Condition Reporting and Corrective Action." The inspectors noted that the licensee had made continued progress in reducing the number of open condition reports. Based on a sample of the reports recently closed, the inspectors concluded that the licensee had adequately resolved the issues identified in the condition reports.

As of August 30, 1996, there were 17 Condition Level 1 condition reports. Condition reports assigned a Condition Level 1 identified significant conditions adverse to quality. The inspectors also reviewed a sample of these condition reports and verified the licensee had adequately addressed the immediate safety concerns. In addition, the inspectors verified that action items resulting from the adverse conditions had been properly prioritized and were being completed within the targeted due dates. The inspectors concluded that the corrective action program was being effectively implemented.

II. Maintenance

M1 Conduct of Maintenance

M1.1 General Comments

a. Inspection Scope (62707)

The inspectors observed portions of the following work activities:

- PMO 9601250, "Annual Maintenance on Security Diesel Generator"
- IC-CP-01-122C-D, "Calibration of Reactor Coolant Loop 2B Cold Leg Temperature Channel D, Loop D/T-122C"
- IC-ST-DG-0063, "Calibration of Emergency Diesel No. 2 Jacket Water High Temperature Switch TA-6127"
- PMO 9601487, "Minor Overhaul of Diesel Driven Auxiliary Feedwater Pump"

b. Observations and Findings

The inspectors found the work performed under these activities to be professional and thorough. All work observed was performed with the work package present and in active use. The inspectors frequently observed system engineers monitoring progress and Quality Control personnel were present whenever required by procedure.

c. Conclusions

The maintenance activities observed were conducted in a controlled and professional manner.

M1.2 Surveillance Activities

a. Inspection Scope (61726)

The inspectors observed portions of the following surveillance activities:

- Turbine Driven Auxiliary Feedwater Pump Run
- Monthly Diesel Generator 1 Run
- Security Diesel Run

b. Observations and Findings

The inspectors noted that these surveillance tests were performed in accordance with their procedures. Surveillance procedures were present and in use during the observations. Communications between personnel performing the tests were good.

c. Conclusions

The surveillance activities observed by the inspectors were completed in a controlled manner and in accordance with procedure.

M4 Maintenance Staff Knowledge and Performance

M4.1 Storage of Transient Combustibles

a. Inspection Scope (62707)

The inspectors toured the intake structure.

b. Observations and Findings

On September 20, 1996, during a tour of the intake structure, the inspectors observed approximately 30, 5-gallon pails of epoxy coating and 35, 1 gallon cans of resin hardener in close proximity to the diesel driven fire pump. The inspectors notified the control room of the observation and corrective action was taken by removing the combustible materials. Based on previous tours of the intake structure, the materials had been stored in the intake structure no more than 2 days.

c. Conclusion

Storing the combustible materials inside the intake structure was a violation of Section 5.4.1.A of Standing Order Procedure SO-G-91, "Control and Transportation of Combustible Material," Revision 7 that requires, in part, that combustibles temporarily retained to support an ongoing work activity be minimized and that they should be limited to 5 gallons of Class B material. The licensee's failure to follow procedures for storage of transient combustibles is a violation of 10 CFR 50, Appendix B, Criterion V (VIO 285/96010-02).

III. Engineering

E1 Conduct of Engineering

E1.1 Diesel Generator Local Operation Panel

a. Inspection Scope (37551)

The inspectors noted a deficiency during a tour of the plant, and evaluated if the licensee had considered effects of a broken emergency diesel generator cabinet latch.

b. Observations and Findings

On September 25, 1996, the inspectors noted that the local operation panel for the diesel generator had a deficiency tag on the cabinet handle, stating that the latch did not work. The inspectors noted that two diesel generator undervoltage relays were installed on the door. The inspectors questioned if the relays had been evaluated with respect to seismic concerns with the latch inoperable.

The licensee stated that the relays had not been evaluated and completed an operability evaluation, which determined that the relays were operable despite the inoperable door latch.

c. Conclusions

In one instance, the licensee demonstrated low sensitivity to the effect of degraded equipment, in that an evaluation to determine operability with respect to seismic qualification had not been performed for diesel generator undervoltage relays installed in a door with a broken latch.

E2 Engineering Support of Facilities and Equipment

E2.1 Review of Updated Safety Analysis Report Commitments

A recent discovery of a licensee operating their facility in a manner contrary to the Updated Safety Analysis Report (USAR) description highlighted the need for a special focused review that compares plant practices, procedures and/or parameters to the USAR description. While performing the inspections discussed in this report, the inspectors reviewed the applicable portions of the USAR that related to the areas inspected. No inconsistencies were noted between the wording of the USAR and the plant practices, procedures and/or parameters observed by the inspectors.

IV. Plant Support

R1 Radiological Protection and Chemistry (RP&C) Controls

R1.1 Radiological Controls

a. Inspection Scope (71750)

On September 20, 1996, the inspectors performed a tour of the auxiliary and radwaste buildings to verify that the material condition of safety and radiological components was adequately maintained.

b. Observations and Findings

During the tour, the inspectors verified that selected doors leading to high radiation areas were locked. The inspectors also observed that a roped barrier for entrance to a contaminated area had not been replaced.

The inspectors also noted, during observations of an auxiliary operator shift turnover, that an auxiliary operator had been contaminated during rounds on the midshift. The inspectors questioned the health physics technician concerning the contamination. The technician was unaware that a contamination had occurred. The technician informed the inspectors that a turnover had not been received concerning a contamination. Also, the contamination log did not contain any information concerning the contamination. The health physics technician informed the inspectors that the contamination should have been recorded.

Once identified, the licensee took the following corrective actions: (1) The health physics technician initiated Condition Report 199601144, on September 20, 1996, to document that the contamination log had not been properly filled out. (2) The technician who failed to log the contamination was counseled immediately by telephone. (3) The individual was later counseled formally on the importance of completing tasks. (4) Lessons learned from this incident were briefed to the radiation protection technicians at the morning meeting, emphasizing the expectation to follow procedures and document required tasks. The inspectors concluded these actions were prompt and thorough.

General radiological housekeeping was good. Area postings and survey maps were properly displayed and current. All personnel observed were appropriately complying with stated postings and radiological requirements. The inspectors also noted that the licensee was continuing to reduce the number and size of contaminated areas. Especially notable were the two safety injection pump rooms.

c. Conclusion

The licensee's ongoing program to reduce the number and size of contaminated areas was good. The failure to follow procedures as required by 10 CFR 50 Appendix B, Criterion V, and record the personnel contamination is a violation (VIO 285/96010-03).

P5 Staff Training and Qualification in EP

a. Inspection Scope (71750)

The licensee conducted an emergency planning drill on September 11, 1996. The inspectors monitored activities in the simulator control room and the technical support center.

b. Observations and Findings

Licensee emergency planning personnel simulated a bomb explosion which caused all offsite power to be lost and a steam generator tube rupture with a stuck open main steam relief valve. Control room operators referred appropriately to emergency response and safe shutdown procedures. The emergency response organization was activated in a timely manner and site personnel responsible for command and control during the scenario were knowledgeable of the applicable station procedures to ensure proper implementation of the emergency plan.

In addition, the inspectors observed that emergency planning personnel provided effective training by creating a challenging drill scenario. Also, all personnel who participated in the exercise were given the opportunity to provide feedback for improving emergency planning during the postdrill critique. The inspectors noted that useful and perceptive comments were provided.

c. Conclusion

Emergency planning personnel used an emergency planning drill to provide effective operations staff and emergency response organization training.

V. Management Meetings

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the exit meeting on October 8, 1996. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Andrews, Division Manager, Nuclear Services
C. Brunnert, Manager, Quality Assurance and Quality Control
J. Chase, Manager, Fort Calhoun Station
R. Connor, Manager, Training
G. Cook, Supervisor, Station Licensing
M. Ellis, Supervisor, Maintenance Support
S. Gambhir, Division Manager, Production Engineering
J. Gasper, Manager, Nuclear Projects
W. Gates, Vice President, Nuclear
S. Gebers, Manager, Radiation Protection
J. Herman, Manager, Outage Management
R. Jaworski, Manager, Design Engineering, Nuclear
J. Keczy, Acting Manager, Operations
B. Kindred, Supervisor, Nuclear Security Operations
A. Patel, Nuclear Safety Review Group
T. Patterson, Division Manager, Nuclear Operations
R. Phelps, Manager, Station Engineering
J. Skiles, Manager, Station Engineering
D. Spires, Manager, Chemistry
J. Tills, Manager, Nuclear Licensing

NRC

V. Gaddy, Resident Inspector
W. Walker, Senior Resident Inspector

INSPECTION PROCEDURES USED

IP 37551: Onsite Engineering
IP 61726: Surveillance Observations
IP 62707: Maintenance Observations
IP 71707: Plant Operations
IP 71750: Plant Support Activities
IP 92904: Followup - Plant Support

ITEMS OPENED AND CLOSED

Opened

50-285/96010-02 VIO Control of combustibles (Section M4.1)

Opened and Closed

50-285/96010-01 NCV tagging error (Section 04.1)

50-285/96010-03 VIO failure to log personnel contamination (Section R1.1)

Closed

None