Omaha Public Power District
444 South 16th Street Mall
Omaha, Nebraska 68102-2247
402/636-2000

December 14, 1990
LIC-90-0916

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

Reference: (1) Docket No. 50-285
(2) Letter from NRC (S. J. Collins) to OPPD (W. G. Gates) dated October 31, 1990

Gentlemen:

SUBJECT: Reply to Notice of Violation (Inspection Report 50-285/90-29)

Omaha Public Power District (OPPD) received the subject inspection report which identified one violation involving the failure to establish and maintain appropriate Emergency Operating Procedures and Abnormal Operating Procedures (EOPs and AOPs). OPPD is committed to improving the EOPs and AOPs, while remaining confident that the operators are capable of utilizing the currently approved procedures to perform the actions required to maintain the plant in a safe condition during a transient. This was demonstrated by the operator's ability to handle the recent loss of instrument air transient in November which involved entry into EOP-20. Please find attached OPPD's response to the Notice of Violation in accordance with 10 CFR Part 2.201.

In addition to the violation, several other weaknesses in the EOP program were identified. Our commitments as summarized in paragraphs 2.4 and 2.5 of the subject report are correct. Those deficiencies identified as safety significant were corrected immediately during the inspection.

OPPD's Quality Assurance (QA) Department conducted a scheduled audit of the EOP program in August of 1990. QA was assisted by an individual with experience in both evaluating adequacy of EOP programs at other utilities and actual implementation of EOPs. Guidance of NUREG-0899 was used as a basis for the audit. QA found problems similar to those identified in the subject report but many corrective actions were not able to be implemented since the inspection was performed within a month of the QA audit. QA's schedule for the audit was based on the arrival of OPPD's plant specific simulator (April 1990) so that the EOPs could be

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evaluated against the Fort Calhoun simulator prior to the audit. This evaluation also identified problems similar to those identified in the inspection report.

Many of the concerns identified during the NRC inspection involved discrepancies with plant labels. OPPD's label upgrade program is scheduled for completion in December 1990. OPPD had assessed the discrepancies between the plant labels and EOPs/AOPs. It was determined that any gains provided by continuous updates to these procedures to match labels were offset by potential insertion of errors into the EOPs/AOPs and greater confusion due to multiple updates and were not cost effective. Therefore, to prevent the EOPs and AOPs from being in a constant state of change, a decision was made to complete the labeling program and then update the EOPs and AOPs to reflect the revised labels.

During the inspection, a concern was raised as to entry into EOPs from off-power conditions. The guidance for entry into EOPs has been established by memo. This directs entry into EOP-00 for various plant conditions when the plant is not critical nor on shutdown cooling. It will be formally incorporated into Standing Order O-1 "Conduct of Operations" by January 31, 1991.

Another concern raised during the NRC inspection was execution of the EOPs with minimum staffing levels in the control room. It is OPPD's understanding that the minimum staffing crew of licensed operators were able to maintain effective control of safety functions but had difficulty in diagnosing the occurrence of complicating events. OPPD had been unable to provide training with minimum staffing in the control room due to the delivery of the simulator. Only two licensed operator requalification cycles had been conducted prior to the subject inspection. OPPD will evaluate the number of licensed operators normally in the control room (Fort Calhoun infrequently has less than three (3) licensed operators in the control room at any given time) and the time required for a licensed operator to return to the control room from within the protected area. Based on this evaluation, OPPD will determine a statistically valid control room crew size and composition and the time required for a licensed operator to return to the control room, and will provide training using this crew configuration in 1991. The results of the operator response time study will be incorporated into the simulator training during the 1991 training cycle.

As discussed in our response to the violation, responsibility and ownership for the EOPs and AOPs was diffused. Because of this diffusion of responsibility, no focal point existed for management oversight of the EOP/AOP development process. To assure adequate oversight of and support of the EOP/AOP rewrite program discussed in the violation response, a committee composed of the Manager: Training, Manager: Nuclear Licensing & Industry Affairs, and Manager: Nuclear Safety Review Group has been formed to assist the Manager: Fort Calhoun Station in overseeing this program.

A two week extension for this response was approved on November 19, 1990 by J. Gagliardo.

If you should have any questions, please contact me.

Sincerely,

W. G. Gates

W. G. Gates
Division Manager
Nuclear Operations

WGG/jb

Attachments

c: LeBoeuf, Lamb, Leiby & MacRae
R. D. Martin, NRC Regional Administrator, Region IV
W. C. Walker, NRC Project Manager
R. P. Mullikin, NRC Senior Resident Inspector

ATTACHMENT A

REPLY TO A NOTICE OF VIOLATION

During an NRC inspection conducted from August 20 through 31, 1990, a violation of NRC requirements was identified. The violation involved the failure to establish and maintain plant procedures. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement," 10 CFR Part 2, Appendix C (1990) (Enforcement Policy), the violation is listed below:

Failure to Establish and Maintain Appropriate Plant Procedures

Technical Specification 6.8.1 requires that, "written procedures be established, implemented, and maintained," for the activities described in Appendix A to Regulatory Guide 1.33, November 1972. Procedures for combating emergencies and abnormal occurrences are included in this requirement.

By order, dated December 17, 1982, Item I.C.1 of NUREG-0737 and Supplement to NUREG-0737 regarding post-TMI action items were made requirements; these included the upgrade of emergency and abnormal operating procedures (EOPs and AOPs). The details of these requirements for upgrade of EOPs and AOPs were described in NUREG-0899 and included a verification and validation process to demonstrate procedural effectiveness.

Contrary to the above, the licensee failed to establish an adequate procedure to control development of the emergency operating procedures. Specifically, the licensee's verification and validation program was inadequate to ensure that the emergency operating procedures were correctly maintained. The failure to establish and maintain adequate EOPs and AOPs was illustrated by the following examples:

a. Validation and verification of EOPs and AOPs did not include adequate walkdowns outside the control room; therefore, multiple errors in nomenclature, direction, and labeling were not identified, thus leaving the procedures in an erroneous state.

b. The EOPs and AOPs contained examples of multiple use of "AND" and "OR" in the same statement, thus providing the potential for confusion in the execution of these procedures.

c. When changes affecting the EOPs or AOPs were made to other procedures, the changes were not always adequately reflected in the EOPs or AOPs, thus resulting in errors and inconsistencies among the procedures.

d. The EOPs and AOPs were not effectively verified against OPPD's writer's guide, as delineated in NUREG 0899, thus resulting in numerous discrepancies and inconsistencies in the procedures.

This is a Severity Level IV violation (285/9020-01)(Supplement 1)

1. Reason for the Violation

OPPD admits that we failed to establish an adequate procedure to control the development of the EOPs and AOPs as stated in the violation. The verification and validation (V&V) process was developed without fully utilizing existing industry expertise which resulted in failing to provide detailed guidance to personnel performing the V&V functions. The weaknesses in the V&V process included:

(1) the failure to perform complete walkdowns of the procedure which included actions outside the control room,

(2) the resolution of validation comments or concerns by the same individual who originated the comment, and,

(3) lack of a multidiscipline review, including human factor aspects of the revisions.

Additionally, OPPD did not assign ownership and responsibility for the EOP maintenance process to a specific individual or group. The EOPs were assigned as additional duties to several individuals. Although the EOPs/AOPs were initially issued in 1986, the writer's guide used in the maintenance of EOPs was developed without applying Human Factor experience and was not a controlled plant document until December 12, 1989. This may have resulted in changes to the EOPs/AOPs which were not in conformance to the written guide. These errors were not corrected during the rewrite process because an adequate V&V was not rigorously performed against the writer's guide criteria.

2. Corrective Steps Which Have Been Taken and Results Achieved

a. The position of EOP/AOP Coordinator was created, formally approved and placed under the direct supervision of the Operations Supervisor. This placed ownership of the EOPs and AOPs with one individual who has full-time responsibility for these procedures.

b. A configuration management program has been put in place to identify changes in hardware and procedures which affect EOPs and AOPs. This program allows a text search of EOPs and AOPs to identify other areas of procedures where a change may apply. This program will be expanded as outlined in the rewrite program below.

c. An EOP/AOP rewrite program has been initiated which includes an upgrade to the writers guide to include human factors aspects of procedure structure. The EOPs/AOPs will be rewritten to conform to the writer's guide. The V&V process will be improved to include a multidiscipline review and complete walkdowns of the procedures as appropriate. The results of the V&V will be incorporated into the AOPs and EOPs. The rewrite program is outlined as follows:

1. Appoint EOP Coordinator under Operations
2. Upgrade/Control Technical Basis Documents
3. Upgrade EOP Writer's Guide
4. Upgrade V&V Process
5. Expand Configuration Management Program to Include Other Operating Procedures
6. Conduct Human Factors Training Including Rewritten Writer's Guide Enhancements
7. Rewrite EOPs/AOPs to Conform with Writer's Guide, PGP and to Correct Previous QA Audit / NRC Inspection Findings

3. Corrective Steps Which Will be Taken to Avoid Further Violations

Completion of corrective actions as outlined in the plan above will avoid further violations. In addition to its normally scheduled EOP audits, Quality Assurance will conduct periodic surveillances of the EOP rewrite program to ensure program objectives are being met.

4. The Date When Full Compliance Will Be Achieved

The EOPs and AOPs, as currently written, are adequate to mitigate the consequences of an accident or transient although weaknesses exist and enhancements are being made. The expected completion date for rewriting, verifying, validating, training on and issuing the EOPs and AOPs to the new writer's guide criteria is June 30, 1992.