

W. GARY GATES  
Vice President

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

June 9, 1994  
LIC-94-0113

Director, Office of Enforcement  
U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station PI-137  
Washington, DC 20555

- Reference:
1. Docket No. 50-285
  2. Letter from OPPD (W.G. Gates) to NRC (Document Control Desk) dated January 10, 1994
  3. Letter from OPPD (W.G. Gates) to NRC (Document Control Desk) dated February 16, 1994
  4. Letter from NRC (L.J. Callan) to OPPD (T.L. Patterson) dated May 10, 1994

Gentlemen:

SUBJECT: NRC Inspection Report No. 50-285/94-06, Reply to a Notice of Violation and Proposed Imposition of Civil Penalty - \$25,000

Omaha Public Power District (OPPD) received the Notice of Violations and Proposed Imposition of Civil Penalty dated May 10, 1994. The Notice of Violations cited multiple failures to follow procedural requirements and a single failure to meet plant Technical Specifications (TS). A \$25,000 civil penalty has been proposed for these problems.

OPPD acknowledges the violations and does not contest the proposed civil penalty. Accordingly, please find attached OPPD's response to the violations pursuant to 10 CFR 2.201 and a check in the amount of \$25,000.

As noted in the cover letter of Reference 4, the violations were caused by a number of personnel errors. In addition to specific corrective actions noted in the attachment, OPPD has instituted the Operations Performance Enhancement Program (OPEP), the details of which were discussed during an Enforcement Conference on March 11, 1994. The OPEP contains activities focused on improving the performance of operations personnel. Approximately 80% of the activities described have been completed. This program has a high level of management oversight, and is being further developed as new items are brought to management's attention. Additionally, some of the OPEP has been incorporated into the Operations Policies and Directives manual as noted elsewhere in this response.

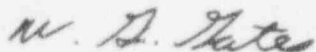
Rec'd check # 18269  
for \$25,000.00

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U.S. Nuclear Regulatory Commission  
LIC-94-113  
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If you should have any questions, please contact me.

Sincerely,



W. G. Gates  
Vice President

WGG/epm

Attachment

c: LeBoeuf, Lamb, Greene & MacRae  
L. J. Callan, NRC Regional Administrator, Region IV  
S. D. Bloom, NRC Project Manager  
R. P. Mullikin, NRC Senior Resident Inspector

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
)  
Omaha Public Power District ) Docket No. 50-285  
(Fort Calhoun Station )  
Unit No. 1) )

AFFIDAVIT

W. G. Gates, being duly sworn, hereby deposes and says that he is the Vice President in charge of nuclear activities of the Omaha Public Power District; that as such he is duly authorized to sign and file with the Nuclear Regulatory Commission the attached information concerning the response to Notice of Violation and Imposition of Civil Penalty (NRC Inspection Report 50-285/94-06); that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information, and belief.

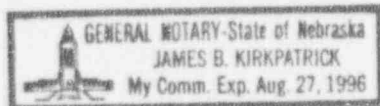
*W. G. Gates*

W. G. Gates  
Vice President

STATE OF NEBRASKA )  
) ss  
COUNTY OF DOUGLAS )

Subscribed and sworn to before me, a Notary Public in and for the State of Nebraska on this 9 day of June, 1994.

*James B. Kirkpatrick*  
Notary Public



Reply to a Notice of Violation  
and  
Proposed Imposition of Civil Penalty

Omaha Public Power District  
Fort Calhoun Station

Docket: 50-285  
License: DPR-40  
EA 94-026

During an NRC inspection conducted January 24-28, 1994, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

- A. Technical Specification 5.8.1 requires, in part, that written procedures be established, implemented, and maintained that meet or exceed the minimum requirements of Sections 5.1 and 5.3 of ANSI N18.7-1972 and Appendix A of USNRC Regulatory Guide 1.33, Revision 2, February 1978.

Regulatory Guide 1.33, Appendix A, states, in part, that written procedures should be developed covering: (1) the authorities for safe operation and shutdown of the facility, and (2) the startup, operation, and shutdown of the chemical volume and control system (CVCS) and the control room ventilation system.

1. ~~Standing~~ Order SO-0-1, Revision 17a, "Conduct of Operations," which delineates management's expectations regarding procedure use and adherence for operational activities, requires, in part, that procedures designated for continuous use be in the possession of the operators performing the activity.

Contrary to the above, on January 18, 1994, Operating Instruction OI-CH-2, "CVCS Purification System Normal Operation," which is designated as a continuous use procedure, was not in the possession of the operators performing an activity governed by the procedure, i.e., restoring an ion exchanger to service. (01013)

2. Operating Instruction OI-CH-2, Revision 10, "CVCS Purification System Normal Operation," requires in step 6.5.12 that the operators rinse Ion Exchanger CH-8A to the radwaste treatment system (RWTS) until the ion exchanger outlet boron concentration is equalized with the RCS boron concentration. Step 6.5.14 requires that, when rinsing is complete, the ion exchanger bypass valve be placed in the bypass mode to divert the rinse water to radwaste for approximately 8-10 minutes, or as directed by the shift supervisor to ensure that the diluted rinse water will not be added to the RCS.

Contrary to the above, on January 18, 1994, Operating Instruction OI-CH-2 was not implemented in that:

- a) the ion exchanger outlet boron concentration was less than the concentration in the RCS when the ion exchanger was placed in service; and
  - b) rinse water was diverted to radwaste for approximately 4 minutes, which resulted in diluted rinse water being added to the RCS and an unanticipated increase in reactor power. (01023)
3. Standing Order SO-G-7, "Operating Manual," which provides the authority for safe operation of the facility, requires in Section 5.7.3 that "Any step N/A'd within an Operating Procedure or Operating Instruction must be initialed, dated and fully explained. "

Contrary to the above, on December 30, 1993, Standing Order SO-G-7 was not implemented in that a step in an Operating Instruction was N/A'd and it was not initialed, dated or fully explained. Specifically, the onshift Licensed Senior Operator determined that the Train B portion of Step 1 of Attachment 4 of Operating Instruction OI-VA-3 "Control Room Ventilation System Normal Operation," was not applicable, but did not initial, date or fully explain this determination. (01033)

#### OPPD Response

##### A. The Reason for the Violation

Example 1 - contrary to Standing Order (S.O.) O-1, Operating Instruction OI-CH-2 was not in the possession of the operator performing the evolution.

This was the result of inadequate command and control. The Licensed Senior Operator (LSO) only provided general instructions to the Reactor Operators (ROs). He failed to clearly designate which RO would perform the evolution.

Early in the shift, the Shift Supervisor, LSO, and Equipment Operator Nuclear Auxiliary (EONA) discussed actions needed to complete activities related to procedure OI-CH-10 for soaking the new resin in ion exchanger CH-8A. The EONA was tasked with these activities since they would all be performed in the Auxiliary Building. While these actions were underway, there were several informal discussions in the control room regarding what would be occurring when the soak was completed. The control room operators understood the need to flush the boric acid from the ion exchanger

upon completion of a 30 minute soak and that RCS letdown was to be diverted to waste during this time.

The LSO had not clearly designated which RO would direct this evolution. At this point only the EONA had the procedure in hand. This resulted in the EONA directing the control room operator through the evolution. This was the first day this crew had worked with this particular LSO. Additionally, the LSO was returning to an on-shift position following an assignment of about eleven months to another department.

Example 2 - The discharge header of the ion exchanger was not adequately flushed to radwaste. This resulted in dilute water being added to the RCS and the resultant unintended increase in reactor power.

Following a boric acid soak of new ion exchange media per OI-CH-2 the RO performing the Ion Exchanger flush asked the LSO how long to flush the header to radwaste prior to realigning letdown to the Volume Control Tank (VCT). The RO understood the LSO to say "a couple of minutes". Because the RO was not comfortable with this direction the RO elected to flush for four minutes. He did not state his concerns to the LSO or utilize the procedure (which calls for an 8-10 minute flush) to confirm the header flush time. Since the RO was uncomfortable with his instruction he should have stopped and requested clarification from the LSO and/or reviewed the relevant procedure before proceeding. Both are expected actions consistent with S.O. 0-1, "Conduct of Operations", and the Operations Policies and Directives Manual (OPD).

This series of errors resulted in an unexpected increase in reactor power. The procedure to be used when flushing and the specific system responses or operational concerns were not fully communicated from the LSO to the RO's. The RO who actually did the flush had reviewed OI-CH-2 some six hours earlier. Since the procedure was not in the possession of the operators, this important procedural step was not followed. This was the result of inadequate command and control as discussed in Example 1 above. Contributing causes to this event were that there was no pre-evolution briefing with the RO's, the failure to designate assigned roles, and the failure to review procedures being used and procedures that would be used. Personnel involved failed to practice self-checking and adequate communications in accordance with approved plant standards. In addition a review of the procedure after the event identified that it could be improved from a human factors standpoint; however, this did not contribute to the failure to follow the procedure.

Example 3 - Standing Order G-7 was not properly implemented in that when steps were N/A'd on OI-VA-3 in Attachment 4 they were not initialed, dated, and justified as required.

Standing Order G-7 specifies rules for designating a step of an Operating Instruction as 'Not Applicable' (N/A), however, the decision to not place the Train 'B' mode selector switch in RECIRC was not documented in accordance with these rules. Operating Instruction OI-VA-3, "Control Room Ventilation System Normal Operation," Attachment 4, "Recirculation (RECIRC) Operation," specified steps to be taken to initiate the RECIRC mode of operation, including placing both mode selector switches in RECIRC. This procedure attachment is "Information Use" and not required to be in-hand during performance of the evolution per S.O. 0-1. At the time of the event, there was no clear guidance on documentation of N/A's in procedures which were not required to be in-hand.

B. Corrective Steps Which Have Been Taken and the Results Achieved

1. The LSO in charge of the evolution had recently returned to shift after an extended assignment with another department. The LSO had completed the required time "under instruction" and had fully met the requirements for training. However, there was no formal reintroduction to the current on-shift operating policies and philosophies. To rectify this condition, an Operations Policy/Directive, OPD-3-11, "Crew Assignments and Crew Makeup" on returning to shift was developed and implemented. This procedure provides a method of insuring that the Operations Supervisor considers not only regulatory requirements when returning an individual to shift, but also considers the individuals knowledge of plant conditions, operations standards changes, and other command and control issues.
2. Procedure OI-CH-2, has been revised. This was considered appropriate because the evolution being conducted required a certain degree of step selection, skipping around and N/A'ing in order to complete the task. The revision has resulted in a more user friendly process for completing this evolution.
3. Standing Order G-7 was revised to provide more definitive guidance on management's expectations for N/A'ing Operating Instructions and Operating Procedures if they are not continuous use. Specifically, the decision to N/A step in a procedure, whether continuous use, reference use, or information use must be discussed with either the Shift Supervisor or LSO. If an LSO wants to N/A step, it must be discussed with the Shift Supervisor.

The revision strengthens the decision process because it prevents a unilateral decision to N/A step.

4. The combination of the several examples cited in this violation prompted the development of the Operations Performance Enhancement Program (OPEP). Information in the OPEP was collected from a variety of sources, including NRC, INPO, QA and NSRG reports, Incident Reports, as well as operator surveys. The OPEP provides a comprehensive action plan focused on fixing personnel performance problems. Also during this time frame operating crew meetings were held to achieve buy-in to the OPEP which emphasized command and control, reactivity management, pre-job briefings, communications, procedure usage, self checking, and formality. Changes to implementation dates in the OPEP require Vice President approval. OPPD management has implemented a policy of increased control room operator monitoring via more frequent formal observations. Additionally, Shift Supervisors are spending increased time in plant spaces with watchstanders.

An independent assessment of activities undertaken by the OPEP was conducted following implementation. The assessment was a week-long effort by several licensed and management individuals with the purpose of ascertaining, in the short term, whether the efforts of the OPEP have been positive, and whether they were in fact addressing the underlying reasons for the violation. The assessment concluded that the Fort Calhoun Station continued to be operated by the Operations Department in a safe manner without threat to the general public. No significant problems were identified as a result of the assessment, however, it was recommended that additional actions be taken in the area of establishing consistent operator work practices for specific areas. Significant progress was noted in the following areas:

- Dedicating resources for the Operations Control Center.
- Dedicating resources for the Operations Procedure Maintenance Group.
- Reducing the number and frequency of required operator logs for equipment operators.
- Shift Supervisor involvement in critiquing of simulator performance.

5. The issues of procedural non-compliance, attention to detail, etc., were presented to exempt nuclear division personnel and management at the most recent Nuclear Performance Meeting held on February 8, 1994. Additional presentation of these issues was made at the Quarterly Maintenance Department Meeting held February 23, 1994. Further, a Plant Wide meeting was held on March 2, 1994. At this meeting the plant staff was briefed on the



potential violations and the activities associated with the OPEP. These meetings and activities have served to heighten the awareness of plant staff to the underlying issues cited in this violation.

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

Management expectations continue to be emphasized via observations, small group meetings, individual/crew briefings and discussions. OPPD will perform another OPEP effectiveness assessment in August 1994 and will continue to perform effectiveness assessments on a continuing basis.

D. Date When Full Compliance Will Be Achieved

OPPD is currently in full compliance.

B. Technical Specification 5.8.1 requires, in part, that written procedures be established, implemented, and maintained that meet or exceed the minimum requirements of Section 5.1 and 5.3 of ANSI N18.7-1972 and Appendix A of USNRC Regulatory Guide 1.33, Revision 2, February, 1978.

Regulatory Guide 1.33, Appendix A, states, in part, that written procedures should be developed covering surveillance testing activities.

Contrary to the above, as of December 9, 1993, the procedure governing surveillance testing of the auxiliary feedwater system was not adequately established. Specifically, Surveillance Test SE-ST-AFW-3005, was inadequate in that the instructions did not provide for the restoration of one train of auxiliary feedwater (AFW) to an operable status prior to aligning the second train of AFW in the full-flow recirculation lineup. Thus, when this procedure was performed, it rendered the second train inoperable, which was in violation of plant Technical Specification requirements for the AFW system. (01043)

OPPD Response

A. The Reason for the Violation

As detailed in Reference 2, it was determined that failure to establish formal guidance on declaring equipment inoperable during surveillance testing was the cause of this event. It was also determined that due to personnel error, a recent revision to SE-ST-AFW-3005 had added steps rendering the steam driven pump FW-10 inoperable for essentially the duration of the test.

B. Corrective Steps Which Have Been Taken and the Results Achieved

1. Surveillance Test SE-ST-AFW-3005 was revised to place the YCV-1045 controller in automatic immediately after the FW-10 suction valve (FW-349) is reopened, and incorporated appropriate provisions related to Technical Specifications T.S. operability considerations. Future performance of this test will no longer render both pumps inoperable concurrently.
2. An Operations Memorandum was issued to provide guidance on operability determinations for equipment out of service for testing. The memorandum provided guidance for surveillance test review and revision prior to their performance, if necessary, to address required actions when automatic functions are disabled. This Operations Memorandum was utilized as an interim action until issuance of procedure S.O. G-100 "Operability Dispositions When Calibrating Or Testing Safety Related Equipment".

Procedure S.O. G-100 was issued on March 31, 1994 to provide guidance on operability determinations for equipment that is out of service for testing. The procedure includes guidance for surveillance test review and revision prior to performance of the surveillance test and, if necessary, to address required actions when automatic functions are disabled. Training was provided to Engineering and Operations personnel on this procedure. Implementation of this standing order has resulted in revisions to various surveillance tests to identify operator actions, improve testing sequence, or change testing frequency.

3. Qualified Reviewers were trained on this event and the associated causes and consequences.
4. OPPD requires that preparers and reviewers of 10 CFR 50.59 evaluations be formally qualified to do so. Following this event, OPPD revoked the 10 CFR 50.59 qualifications for the preparer and reviewer of the procedure change to ST-SE-AFW-3005 until retraining of these individuals had been completed.

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

A review of existing surveillance test procedures will be completed prior to the 1995 Refueling Outage, to ensure that they comply with the guidance provided in S.O. G-100.

D. Date When Full Compliance Will Be Achieved

OPPD is currently in full compliance.

C. Technical Specification 2.22 requires, in part, that the toxic gas monitors be operable. If both of the toxic gas monitors are not operable, within 1 hour initiate and maintain operation of the control room ventilation system in the recirculation mode of operation.

Contrary to the above, on December 30, 1993, at 12:15 am, both toxic gas monitors became inoperable. Train B of the control room ventilation system was not placed in the recirculation mode of operation until 4:05 a.m. on December 30, 1993 because the onshift Licensed Senior Operator (LSO) determined that Operating Instruction OI-VA-3 "Control Room Ventilation System Normal Operation," was not applicable for Train B. (01053)

OPPD Response

A. The Reason for the Violation

As detailed in Reference 3, a Root Cause Analysis was conducted for this event which showed the root cause to be a failure to complete procedural requirements because the LSO mistakenly thought that the existing tagout precluded train "B" from going to the filtered mode. Specifically, Operating Instruction OI-VA-3, "Control Room Ventilation System Normal Operation," Attachment 4, "Recirculation (RECIRC) Operation," specified steps to be taken to initiate the RECIRC mode of operation, including placing both mode selector switches in RECIRC. OI-VA-3 did not, however, contain specific instructions referencing TS 2.22. It also did not indicate that failure to place both trains of Control Room Ventilation in the recirculation mode could potentially result in undesirable ventilation configurations.

B. Corrective Steps Which Have Been Taken and the Results Achieved

1. Standing Order G-7 was revised as noted in the response to violation item A.3.
2. The ventilation system training lesson plan was assessed to ensure that Control Room Ventilation System control logic and TS 2.22 requirements were adequately addressed. Additional training on this system and TS 2.22 was provided in the Licensed Operator training rotation 94-2.
3. Operating Instruction OI-VA-3, Attachment 4 was revised to better

reference and address TS 2.22 requirements.

4. Improved scheduling controls were implemented for replacement of toxic gas monitor chemcassettes. This staggers the replacement schedule to reduce the likelihood of entries into the TS 2.22 one-hour LCO resulting from running out of chemcassette tape on both trains of toxic gas monitors at the same time.
5. The labels for the Control Room Ventilation System mode selector switches were revised to more accurately describe their function.

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

Previously completed corrective actions as noted in the response to violation item A.3 are adequate to avoid further violations.

D. Date When Full Compliance Will Be Achieved

OPPD is currently in full compliance.