



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064

SEP 14 1994

Docket: 50-285  
License: DPR-40

Omaha Public Power District  
ATTN: T. L. Patterson, Division Manager  
Nuclear Operations  
Fort Calhoun Station FC-2-4 Adm.  
P.O. Box 399, Hwy. 75 - North of Fort Calhoun  
Fort Calhoun, Nebraska 68023-0399

SUBJECT: NRC INSPECTION REPORT 50-285/94-15 (NOTICE OF VIOLATION)

Thank you for your letter of August 1, 1994, in response to our letter and Notice of violation (Notice) dated June 30, 1994. We have reviewed your reply and find it responsive to Violation B of our Notice. However, we have the following comments and request for additional information with respect to your response to Violation A of our Notice. This was discussed with your staff during the August 21, 1994, telephone call between Messrs. T. Westerman and C. Paulk of this office and Messrs. G. Cook, R. Jawarski, and J. Skiles of your staff.

We concur that Violation Examples A.1 and A.2 of our Notice dated June 30, 1994, occurred prior to the corrective actions provided in your response dated March 7, 1994, to our earlier Notice dated January 4, 1994, for a similar violation with respect to the post-modification testing following modification to the main turbine electric hydraulic control system. We, therefore, retract these two examples.

However, based on our review of your response dated March 7, 1994, to our Notice dated January 4, 1994, we did not find that your response addressed the review of inprocess or completed design change packages and temporary modifications to determine that adequate post-modification testing had been performed. We, therefore, request that you provide an additional response to describe the reviews performed.

We also request that you clarify the statement in response dated March 7, 1994, with respect to post-modification testing which stated, "OPPD is presently in full compliance based on the completed actions listed above." In your response dated August 1, 1994, additional actions appeared to be necessary to achieve full compliance.

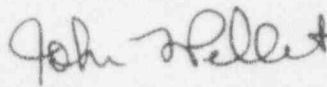
With regard to Violation Example A.3 of our Notice dated June 30, 1994, we do not find the violation to be "incorrect," as stated in your response dated August 1, 1994. We acknowledge, as stated in NRC Inspection Report 50-285/94-15, that Temporary Modification TM-94-007, Revision 1, specified that post-modification testing was required; however, we found no

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written instruction for the conduct and documentation of post-modification testing. There was no data package or documented review and analysis of vibration data in the modification package provided to our inspectors. Therefore, we consider Violation Example A.3 of our Notice dated June 30, 1994, to have been properly cited.

Should you have any questions regarding this letter, please contact T. F. Westerman of this office.

Sincerely,

  
for Thomas P. Gwynn, Director  
Division of Reactor Safety

cc:  
LeBoeuf, Lamb, Greene & MacRae  
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ATTN: Thomas Lamberson, Deputy Director  
P.O. Box 98922  
Lincoln, Nebraska 68509-8922

Omaha Public Power District

-3-

Fort Calhoun Station  
ATTN: James W. Chase, Manager  
P.O. Box 399  
Fort Calhoun, Nebraska 68023

bcc to DMB (IE01)

bcc w/Enclosure distrib. by RIV:

L. J. Callan  
 DRSS-FIPB  
 Branch Chief (DRP/A)  
 RIV File  
 Senior Resident Inspector - Cooper  
 T. Westerman

Resident Inspector  
 MIS System  
 Project Engineer (DRP/A)  
 Branch Chief (DRP/TSS)  
 Leah Tremper, OC/LFDCB, MS: MNBB 4503  
 C. Paulk

*Violation B is DRSS/Safeguards issue.  
 WJ 9/7/94*

RIV:RI:EB	C:EB <i>AK</i>	D:DRS <i>AK</i>	D:DRSS <i>AK</i>	D:DRP	D:DRS <i>AK</i>
CJPaulk <i>CE</i>	TFWesterman	TPGwynn	SJCollins	ABBeach <i>AK</i>	TPGwynn
09/6/94	09/6/94	09/7/94	09/12/94	09/13/94	09/13/94

bcc to DMB (IE01) \\\

bcc w/Enclosure distrib. by RIV:

L. J. Callan

DRSS-FIPB

Branch Chief (DRP/A)

RIV File

Senior Resident Inspector - Cooper

T. Westerman

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Project Engineer (DRP/A)

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Leah Tremper, OC/LFDCB, MS: MNBB 4503

C. Paulk

Violation B is DRSS/Safeguards issue.  
 09/13/94

RIV:RI:EB	C:EB <del>AK</del>	D:DRS <del>AK</del>	D:DRSS <del>AK</del>	D:DRP <del>AK</del>	D:DRS <del>AK</del>
CJPaulk <del>CE</del>	TFWesterman	TPGwynn	SJCollins	ABBeach <del>AK</del>	TPGwynn
09/6/94	09/6/94	09/7/94	09/12/94	09/13/94	09/13/94

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**Omaha Public Power District**

P.O. Box 399 Hwy. 75 - North of Ft. Calhoun Fort Calhoun, NE 68023-0399  
402/636-2000

August 1, 1994

LIC-94-0158

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station P1-137  
Washington, DC 20555

References: 1. Docket No. 50-285  
2. Letter from NRC (T. P. Gwynn) to OPPD (T. L. Patterson) dated June 30, 1994

Gentlemen:

SUBJECT: NRC Inspection Report No. 50-285/94-15, Reply to a Notice of Violation (NOV)

The subject report transmitted two NOV's resulting from an NRC inspection conducted May 9-27, 1994, at the Fort Calhoun Station. Attached is the Omaha Public Power District (OPPD) response to these NOV's.

If you should have any questions, please contact me.

Sincerely,

*W. G. Gates*

for  
W. G. Gates  
Vice President

WGG/grc

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

94-1585

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REPLY TO A NOTICE OF VIOLATION

Omaha Public Power District  
Fort Calhoun Station

Docket: 50-285  
License: DPR-40

VIOLATION

During an NRC inspection conducted on May 8-27, 1994, three 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 violations are listed below:

- A. Criterion V, Appendix B of 10 CFR 50, states "[a]ctivities affecting quality shall be prescribed by documented instructions, procedures, or drawings . . . and shall be accomplished in accordance with these instruction, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

The Fort Calhoun Station Quality Assurance Plan, Revision 3, Section 2.1, paragraph 4.2.1, states, in part, that activities affecting quality shall be prescribed by documented instructions or procedures and shall be accomplished in accordance with these instructions or procedures.

1. Contrary to the above, in October 1993, the licensee implemented Modification MR-FC-90-058, "Component Cooling Water Relief Valve Unions," without specifying instructions to perform a leakage test following the installation of the modification.
2. Contrary to the above, on October 12, 1993, the licensee failed to provide for the performance of post-maintenance testing on Maintenance Work Order No. 924511, Revision 1, after the installation of Temporary Modification 94-002.
3. Contrary to the above, on or about March 9, 1994, the licensee failed to provide written instructions for the conduct and documentation of the post-modification vibration testing after installation of a flow orifice in the raw water line to the component cooling water heat exchanger under the guidance of Temporary Modification 94-007.



These violations represent a Severity Level IV problem (Supplement I) (285/9415-01)

- B. Licensee Condition 3.D of Amendment 42 to the Fort Calhoun Station Facility Operating License, dated March 25, 1981, requires that the licensee maintain in effect, and fully implement, all provisions of the Commission-approved physical security plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p).

Paragraph 6.0 of the Physical Security Plan states that, "[i]ndividuals requiring unescorted access to the Protected and Vital Areas of Fort Calhoun Station shall be authorized such access in accordance with Regulatory Guide (RG) 5.66, June 1991, and its appendix, which satisfies the requirements of 10 CFR 73.55."

Paragraph 6.3 of Regulatory Guide 5.66 requires that a psychological evaluation be completed prior to granting unescorted access.

Paragraph 7.1(a) of Regulatory Guide 5.66 requires that licensees must consider willful omission or falsification of material information submitted in support of employment or request for unescorted access authorization when determining the reliability, or trustworthiness, of an individual.

Contrary to the above, three contractor personnel were granted access in September 1993 without having received a psychological evaluation. Further, another contractor individual falsified, or willfully omitted, criminal history information, and the licensee was unaware of the fact.

This is a Severity Level IV violation (Supplement III) (285/9415-02)

#### OPPD RESPONSE

To simplify this response, OPPD has responded to each violation separately. Section "A" of this response will address only section "A" of the Notice of Violation and section "B" of the response will address only section "B" of the Notice of Violation.



## SECTION A RESPONSE

### 1. The Reason for the Violation

This violation resulted from three separate incidents.

Example one was cited because of a failure to specify the setpoint criteria and leak checking method with the acceptance values in the Post-Modification Test procedure of the design package. This violation resulted from a lack of procedural guidance (at the time that the design package was prepared) in the procedures which govern Post-Modification Testing. Although Post-Modification Testing was properly performed, the final construction package lacked complete documentation of that testing. The design change package stated that the Relief Valve Program engineer was to be notified to perform setpoint testing prior to installation of the relief valves. The Relief Valve Program engineer was notified and code required setpoint and seat leakage testing was performed on the relief valves in question.

Example two of the violation was cited for a failure to provide for the performance of Post-Maintenance Testing on Maintenance Work Order (MWO) No. 924511, Revision 1, after the installation of Temporary Modification (TM) 94-002. In reference to the "Details" section of Inspection Report 94-15, Page 11, Section 3.3.3, "Temporary Modification 94-002", the report correctly states that the team identified two concerns related to activities performed prior to the installation of TM 94-002. However, example two of this violation, discussed on Notice of Violation, page "i", Appendix A, is stated incorrectly in that the violation was cited for failure to provide instructions for the performance of the testing after TM 94-002 was installed.

Standing Order (S.O.) M-101, "Maintenance Work Control" and Maintenance Department Instruction No.7 (MDI-7), "Maintenance Planners Instructions" delineate procedural requirements for review and approval of changes to MWOs. This violation resulted because the changes made to MWO 924511 were determined by the planner to not constitute a change in work scope as defined in the referenced procedures. Therefore, the changes did not receive a technical review for specification of Post-Maintenance Testing. S.O. M-101 and MDI-7 are unclear regarding technical review of changes to MWOs.

The Reason for the Violation (Continued)

A contributing cause to the event was a lack of cross-discipline knowledge by the Maintenance Planner responsible for preparing the change to MWO 924511.

Example three of the violation was cited for a failure to provide written instructions for the conduct and documentation of the Post-Modification vibration testing after installation of a flow orifice under the guidance of TM 94-007. Example three of this violation is incorrect in that it states the TM failed to provide written instructions for taking vibration measurements after the installation of a flow orifice. TM 94-007, Revision 0, installed on March 9, 1994, removed a flow orifice and installed a 12" spacer in its place. No Post-Modification vibration testing was specified, or necessary, since the system was being returned to its original design configuration.

In modification MR-FC-90-26, completed during the 1992 refueling outage, a flow orifice was installed to reduce excessive pipe erosion. However, the flow orifice caused excessive vibration in the associated piping. On March 3, 1994, TM 94-007, Revision 1 was installed to change the orifice size to reduce/eliminate the vibration. During the conduct of MR-FC-90-26 and TM 94-007, Revision 1, Post-Modification Testing was properly specified. This included specification of vibration testing for the TM that changed the orifice size (TM 94-007, Revision 1).

On March 10, 1994, vibration readings were also taken following installation of TM 94-007, Revision 0. The readings were not taken as part of the TM, but for additional information needed to complete EAR 94-015 in which Design Engineering was evaluating the vibration associated with MR-FC-90-26. The vibration measurements that were obtained on March 10, 1994 were not obtained to satisfy testing requirements for TM 94-007, Revision 0.

2. Corrective Steps That Have Been Taken and the Results Achieved

The following corrective steps that have been taken are related to Example One of the violation.

- a. This incident occurred prior to the corrective actions that were taken in reply to Notice of Violation 9326-01, issued by the NRC for inadequate Post-Modification Testing. In the reply to this Notice of Violation, OPPD committed to convene a Process Enhancement Team (PET) to review and recommend changes to the Post-Modification

Corrective Steps That Have Been Taken and the Results Achieved  
(Continued)

Testing procedures. The review and recommended changes were completed on March 21, 1994. The changes and enhancements included:

- (1) Development of more rigorous procedural guidance for specifying Post-Modification Testing criteria. This guidance has been integrated into General Engineering Instruction GEI-7, "Specification of Post Modification Test Criteria".
  - (2) Implementation of the Test Engineer function within Nuclear Construction Management with individuals experienced in system/component startup testing.
  - (3) Revision of existing configuration control procedures to require the Test Engineers to participate in the development and review of testing criteria in design packages.
- b. Additionally, in the response to Notice of Violation 9326-01, OPPD committed to including appropriate PET recommendations into procedures and completing training on the Post-Modification Testing process changes. This was completed on June 1, 1994.
- c. Specific instructions were added to GEI-7, "Specification of Post-Modification Test Criteria". These instructions require identification of applicable Post-Modification Testing procedures or special testing requirements and acceptance criteria to be listed on forms within GEI-7. Procedure GEI-7 was revised and a training "Hotline" was issued on August 1, 1994.

The following corrective steps that have been taken are related to Example Two of the violation.

- d. Maintenance Planning personnel have been briefed on this event. Emphasis on intent of the procedural guidance and attention to detail related to work scope changes were stressed. This was completed on August 1, 1994.

Corrective Steps That Have Been Taken and the Results Achieved  
(Continued)

No corrective actions are necessary related to Example Three of the violation.

3. Corrective Steps That Will Be Taken to Avoid Further Violations

Related to Example One of the violation, corrective actions have been completed as detailed above.

Related to Example Two of the violation, the following corrective actions will be taken to avoid further violations:

- a. SO M-101 and MDI-7 will be revised to strengthen the process for review of changes to MWO's. The procedures will be changed by September 15, 1994 and training will be completed by November 1, 1994.
- b. Additional training will be provided to the Maintenance Planners regarding identification of Post-Maintenance Testing requirements for cross-discipline Maintenance Work Orders. This training will be completed by February 1, 1995.

Related to Example Three of the violation, no corrective actions are necessary.

4. Date When Full Compliance Will Be Achieved

OPPD is presently in full compliance based on the completed actions listed above.

SECTION B RESPONSE

1. The Reason for the Violation

This violation resulted from two separate incidents. The first incident related to three contractor personnel being granted access to Fort Calhoun Station (FCS) in September 1993 without having received a psychological assessment as required by 10CFR73.56(b)(2)(ii). The second incident is related to an individual that was granted unescorted access to FCS even though a Criminal History Check (CHC) later revealed that this

The Reason for the Violation (Continued)

individual had been arrested for a crime that would, not in itself, be a potential disqualifier.

Relative to the first incident, OPPD contracts with vendors that have self-screening programs. These programs are based upon acceptance of the vendor's certification of compliance with OPPD's Nuclear Contractor Access Authorization Program requirements, which includes the requirements of Regulatory Guide 5.66. Compliance is validated through annual Quality Assurance audits of the vendors' programs. In this instance, the vendor falsely certified that the aforementioned three individuals had completed all elements of the background investigation when, in fact, they had not.

Relative to the second incident, OPPD failed to detect a discrepancy between information provided by the individual requesting unescorted access and the results of the Federal Bureau of Investigation CHC. The incident occurred because, in the past, the two documents were not maintained at the same location and were not routinely compared. The Personnel Security Questionnaire (PSQ) is not normally requested from a self-screening vendor unless the CHC indicates an arrest for a crime that would be a potential disqualifier.

2. Corrective Steps That Have Been Taken and the Results Achieved

The following corrective actions that have been taken are related to the three contractor personnel being granted access to FCS without having received a psychological evaluation.

- a. The (inactive) files of the three individuals were annotated to reflect the fact that required documentation was lacking and that these individuals could not be badged at FCS without completing the required psychological assessments. This was completed on March 1, 1994.
- b. The vendor's Nuclear Contractor Access Authorization Program was temporarily suspended to verify the validity of active clearances for their employees. This was completed on March 4, 1994.



Corrective Steps That Have Been Taken and the Results Achieved  
(Continued)

- c. The three individuals were subsequently administered and passed the required psychological evaluations. This was completed on April 20, 1994.
- d. The vendor's self-screening program was audited by OPPD to verify the integrity of the overall program. A subsequent OPPD audit was conducted to confirm that corrective actions initiated by the vendor were implemented. Through a QA audit, OPPD verified the integrity of the program. During the followup audit, OPPD verified corrective actions were implemented. These actions were completed on March 9, and May 17, 1994, respectively. Additionally, on July 11, 1994, the vendor's Nuclear Contractor Access Authorization Program was suspended indefinitely.

The following corrective actions are related to the individual that was granted unescorted access to Fort Calhoun Station even though a CHC later revealed that this individual had been arrested.

- e. If a CHC has potentially disqualifying information, corrective actions are being taken to ensure that the PSQ and CHC are routinely compared when the CHC becomes available. However, it should be noted that this comparison is normally not done until thirty to forty-five days after the individual has been badged. Since the NRC has determined that such a comparison is an integral and important element of the access authorization process, guidance to all licensees would seem appropriate, since this issue appears to be a generic issue. This was brought to the NRC inspector's attention during Inspection 94-15.
- f. The individual was placed on the OPPD Denied Access List. This was completed on May 26, 1994.
- g. Philadelphia Electric Company (Limerick Nuclear Generating Station), to whom the individual's clearance had been transferred, was notified. This was completed on May 26, 1994.
- h. A FCS Security Incident Report describing the event was prepared. This was completed on May 26, 1994.

March 7, 1994

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

LIC-94-0053

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station P1-137  
Washington, DC 20555

References: 1. Docket No. 50-285  
2. Letter from NRC (A. B. Beach) to OPPD (T. L. Patterson) dated February 4, 1994

Gentlemen:

SUBJECT: NRC Inspection Report No. 50-285/93-26, Reply to a Notice of Violation (NOV)

The subject report transmitted an NOV resulting from an NRC inspection conducted November 21, 1993 through January 1, 1994 at the Fort Calhoun Station. Attached is the Omaha Public Power District response to this NOV.

If you should have any questions, please contact me.

Sincerely,

*W. G. Gates*

W. G. Gates  
Vice President

WGG/grc

Attachment

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

94-0630



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

1. A comprehensive RCA was performed on this event. OPPD determined and confirmed, through troubleshooting and testing, the cause of the turbine trip and subsequent reactor trip.
2. A Field Design Change Request and a Construction Work Order were generated to modify the EHC system tubing. Following the modification, Post Modification Testing (PMT) was successfully completed. This was completed on December 6, 1993.
3. Appropriate Production Engineering Division personnel have been briefed on this event. Emphasis on adherence to procedural guidance and attention to detail in design, pre-operational testing development and review were stressed.
4. The adequacy of the 1993 Refueling Outage EHC system ECNs, Maintenance Work Orders, Preventive Maintenance Orders and Modification Requests were reviewed for similar discrepancies. As a result of the review, no further problems were identified.
5. PMT procedures for the 1993 Refueling Outage ECNs were reviewed for similar discrepancies. As a result of the review, no further problems were identified.
6. Procedure PED-QP-2, "Configuration Change Control", was revised to require consideration of PMT requirements for Facility Change ECNs on Non-CQE systems which could challenge plant operation. In PED-QP-2, OPPD has established guidance to assist in the identification of Facility Change ECNs that have the potential to impact plant safety or reliability. Additionally, PED-QP-2 now specifies enhanced levels of review by plant personnel for those ECNs which could impact plant safety or reliability.
7. A temporary Test Working Group has been established. The group consists of experienced personnel from System Engineering, Construction Management, Design Engineering and Plant Operations. The purpose of this group is to conduct reviews, provide recommendations and approve PMT procedures for Design Change Packages, Facility Change ECNs and Temporary Modifications to ensure that testing objectives, as described in the charter, are met. These testing objectives are:
  - a) Testing and acceptance criteria are clearly established to assure that the total function of components, systems and structures affected by a modification are adequately tested.
  - b) PMT considers operating modes including normal and abnormal operating procedures and routine operational requirements (e.g., weekly swapping of equipment).

B. Corrective Steps That Have Been Taken and the Results Achieved (Continued)

The Test Working Group will perform this function until the PMT process has been further evaluated and any necessary process changes identified and implemented. The charter for this group states that the group will disband in June, 1994. At that time, the enhancements prescribed as a result of the Process Enhancement Team (PET) review discussed below are expected to have been implemented.

C. Corrective Steps That Will Be Taken to Avoid Further Violations

1. As an added assurance, a Process Enhancement Team (PET) on PMT has been convened to review and recommend changes to the PMT process and procedures. The review and recommendations will be completed by March 18, 1994. Appropriate PET recommendations will then be incorporated into procedures and training will be completed on PMT process changes as necessary. The PMT process changes and training will be completed by June 1, 1994.

D. Date When Full Compliance Will Be Achieved

OPPD is presently in full compliance based on the completed actions listed above.