

NOTICE OF VIOLATION  
AND  
PROPOSED IMPOSITION OF CIVIL PENALTY

Omaha Public Power District  
1623 Harney Street  
Omaha, Nebraska 68102

Docket No. 50-285  
License No. DPR-40  
EA 87-210

During NRC inspections conducted during the periods of September 23 through October 2, 1987, and November 2-6, 1987, 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 (1987), 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 penalties are set forth below:

Design Evaluation

- A. 10 CFR 50.59(a) allows the holder of a license to make a change in the facility as described in the safety analysis report (SAR) without prior Commission approval unless it involves a change in the technical specification or involves an unreviewed safety question. A proposed change involves an unreviewed safety question: (1) if the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the SAR may be increased, (2) if a possibility for an accident or malfunction of a different type than any evaluated previously in the SAR may be created, or (3) if the margin of safety as defined in the basis for any Technical Specification is reduced.

10 CFR 50.59(b) requires, in part, that the licensee maintain records of changes in the facility to the extent that such changes constitute changes in the facility as described in the SAR. These records shall include a written safety evaluation which provides the bases for the determination that the change does not involve an unreviewed safety question.

Section 9.12 of the Fort Calhoun Station Updated Safety Analysis Report (USAR) describes, in part, that the compressed air system provides compressed air to the instrument air header for pneumatic controls and the actuation of valves, dampers, and similar devices, and states that the system has a design basis of a maximum instrument air dew point of -20°F.

Contrary to the above, the licensee failed to perform an adequate evaluation, as required by 10 CFR 50.59(a), to determine if an unreviewed safety question existed when Modification MR-FC-83-182 was installed on May 22, 1985 to connect the Instrument Air System to the Fire Protection System. Although the licensee completed a 10 CFR 50.59 evaluation to determine the effect of the modification on the Fire Protection System, it failed to evaluate the effect of the modification on the Instrument Air System and the potential

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for introduction of water from the Fire Protection system into the Instrument Air System. The introduction of water into the Instrument Air System could result in a common mode failure through flooding of the Instrument Air System, which supplies the motive force for equipment or components in redundant trains of safety-related equipment. The intrusion increased the probability of the malfunction of safety-related equipment, and components because moisture caused the system to not meet the design bases for a dew point maximum limit of  $-20^{\circ}\text{F}$  which is specified in Section 9.12 of the Fort Calhoun Station USAR. The unreviewed safety question existed until the Instrument Air/Fire Protection System interface was disconnected in October 1987.

This is a Severity Level III violation (Supplement I).  
Civil Penalty - \$75,000.

Design Implementation and Classification/Reporting

- B.1. 10 CFR Part 50, Appendix B, Criterion XI and Section 8.4 of the OPPD Quality Assurance Plan requires, in part, that a test program be established to assure that all testing required to demonstrate that components will perform satisfactorily in service is identified and performed in accordance with written test procedures.

Contrary to the above, on May 22, 1985, the licensee installed check valves in the Instrument Air System to ensure that water from the Fire Protection System did not enter the Instrument Air System, but failed to establish a test program that would assure that the check valves would perform satisfactorily in service. Subsequently, on July 6, 1987, the check valves failed to perform their intended function, resulting in the introduction of fire water into the Instrument Air System.

- B.2. 10 CFR Part 50, Appendix B, Criterion V and the OPPD Quality Assurance Plan, Section 2.1 require, in part, that activities affecting quality be prescribed by documented instructions of a type appropriate to the circumstances.

- a. Procedure ST-FP-5, "Fire Protection-Auxiliary Building Sprinkler Systems Testing," specifies how the licensee is to test the dry-pipe fire system in the emergency diesel generator rooms.

Contrary to the above, Procedure ST-FP-5 failed to provide adequate instructions for the performance of surveillance testing activities on the dry-pipe system in the emergency diesel generator rooms. Procedure ST-FP-5 did not provide specific step-by-step instructions for returning the dry-pipe system to the normal lineup after completion of the surveillance test. Consequently, water from the Fire Protection System was introduced into the Instrument Air System during the performance of the test on July 6, 1987.

- b. Procedure AOP-17 "Loss of Instrument Air," Revision 2, dated July 2, 1986, requires the licensee to provide instructions to operations personnel for the mitigation of a plant transient due to the effect of the loss of instrument air on 14 different safety-related systems.

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Contrary to the above, Procedure AOP-17 failed to provide adequate instructions to operations personnel in that the procedure did not adequately address the effect of loss of instrument air for each of the safety-related systems specified. For example, the procedure did not address the effect of the loss of instrument air of the radiator exhaust dampers on the emergency diesel generators. Furthermore, it did not provide specific information regarding the backup capability of the accumulators installed on specific safety-related equipment (e.g., the procedure stated that level indication for the safety injection and refueling water tank would be lost, when in fact, the tank level indication is available up to 4 hours after the loss of instrument air).

- B.3. Technical Specification 2.7 states, in part, that the reactor shall not be heated up or maintained at temperatures above 300°F unless both diesel generators are operable. Additionally, Technical Specification 2.7 states that if one diesel generator becomes inoperable it may remain inoperable for up to seven days provided the other diesel is started to verify operability, shutdown and controls are left in automatic mode and there are no inoperable safeguards components associated with the operable diesel generator.

The Definitions section of the Technical Specification states, in part, that a component shall be operable "when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary...auxiliary equipment that are required for the component...to perform its function(s) are also capable of performing their related support function(s)...."

Contrary to the above, the reactor was maintained at temperatures above 300°F for greater than seven days while Emergency Diesel Generator (EDG) 2 was inoperable. On July 6 and August 25, 1987, water entered the Instrument Air System rendering the air accumulator associated with air driven motor for the EDG 2 radiator exhaust damper inoperable, thus rendering EDG 2 inoperable. EDG 1 was not started to verify operability. This condition existed until discovered during a surveillance test on EDG 2 performed September 23, 1987.

- B.4. Fort Calhoun Station Technical Specification 5.8.1 requires that procedures be established, implemented, and maintained that meet or exceed the minimum requirements of ANSI N18.7-1972 (Sections 5.1 and 5.3).

ANSI N18.7-1972, Section 5.1.6.1 states that maintenance which can affect the performance of safety-related equipment shall be in accordance with written procedures and Section 5.3.5(3) states that instructions shall be included (or referenced) for returning equipment to normal operating status, giving special attention to systems that can be defeated by leaving valves, breakers, or switches mispositioned.

Contrary to the above, at the time of the NRC inspections, even though mispositioning of an instrument air isolation valve led to the August 25, 1987 water intrusion event, the licensee had not provided a procedure

or instruction to ensure proper positioning of valves, breakers, or switches prior to returning the Instrument Air System to normal operating status.

- B.5. 10 CFR 50.47(b)(4) states, in part, that the onsite emergency response plan for nuclear power reactors must contain a standard emergency classification and action level scheme. The licensee's Procedure EPIP-OSC-1, "Emergency Classification," implements the requirements of 10 CFR 50.47(b)(4).

Section IV.2 of EPIP-OSC-1 states, in part, that the shift supervisor shall evaluate the condition and determine the applicable emergency classification. Note 1.a of Section IV.d defines a notification of unusual event (NOUE) as events in progress or which have occurred which indicate a potential degradation of the level of safety of the plant.

Contrary to the above, the shift supervisor failed to determine the applicable emergency classification and declare a NOUE when an event occurred which indicated a potential degradation of the level of safety of the plant. On July 6, 1987, an unknown amount of water from the Fire Protection System was introduced into the Instrument Air System and resulted in a potential common mode failure condition.

- B.6. 10 CFR 50.72 states, in part, that each nuclear power reactor licensee shall notify the NRC Operations Center via the Emergency Notification System, within 1 hour, of any event or condition during operation that results in the condition of the nuclear power plant being in an unanalyzed condition that significantly compromises plant safety.

10 CFR 50.73 states, in part, that the holder of an operating license for a nuclear power plant shall submit a Licensee Event Report (LER), within 30 days after the discovery of any event where the plant is in an unanalyzed condition that significantly compromises plant safety.

Contrary to the above, the licensee failed to notify the NRC Operations Center within 1 hour and failed to submit an LER within 30 days, of an event that resulted in an unanalyzed condition that significantly compromised plant safety. On July 6, 1987, an undetermined amount of water was introduced into the Instrument Air System and resulted in a potential common mode failure condition. The plant was in an unanalyzed condition in that the licensee did not determine the capability of the Instrument Air System to provide the motive force for operation of redundant safety-related equipment and components for at least two days after the water from the Fire Protection System was introduced into the Instrument Air System.

These violations are considered in the aggregate to be a Severity Level III problem (Supplement I).  
Civil Penalty - \$50,000 (assessed equally among the violations).

#### Corrective Action

- C. 10 CFR Part 50, Appendix B, Criterion XVI and Section 10.4 of the OPPD Quality Assurance Plan require, in part, that measures shall be established to assure that conditions adverse to quality are promptly

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identified and corrected. In the case of significant conditions adverse to quality, these measures must assure that the cause of the condition is determined and corrective action is taken to preclude repetition.

Contrary to the above, water from the Fire Protection System was introduced into the Instrument Air System on July 6, 1987, and the licensee failed to determine the cause of the condition adverse to quality and failed to take corrective action to preclude repetition such that:

1. After introduction of water into the Instrument Air System on July 6, 1987, the licensee did not perform dew point measurements of air in the system to verify that the system complied with the design bases for the dew point maximum limit.
2. Even after water was introduced into the Instrument Air System through the connection that maintained the portion of the Fire Protection System in the emergency diesel generator rooms as a dry-pipe system, the licensee cleaned and inspected the associated check valves to verify proper operation and reinstalled the interconnection between the Fire Protection and Instrument Air systems. By reinstalling the interconnection, the licensee reestablished, in its original configuration, the condition that had led to the introduction of water into the Instrument Air System.
3. After the introduction of water into the Instrument Air System, the licensee did not perform a review to determine whether other instrument air/pressurized water interfaces existed in the system. Subsequently, on August 25, 1987, another event occurred in which water was introduced into the Instrument Air System through an interface with a plant water system.
4. After the introduction of water into the Instrument Air System, the licensee commenced a formal program for performing blowdowns to remove the water and/or moisture from the Instrument Air System. However, the licensee failed to blowdown some accumulators to verify that water and/or moisture was not present. For example, water was found in the accumulator for the Emergency Diesel Generator (EDG) 2 radiator exhaust damper during an investigation performed after EDG 2 failed its surveillance test on September 23, 1987.

This is a Severity Level III violation (Supplement I).  
Civil Penalty - \$50,000.

Pursuant to the provisions of 10 CFR 2.201, Omaha Public Power District (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order may be issued to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be

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taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

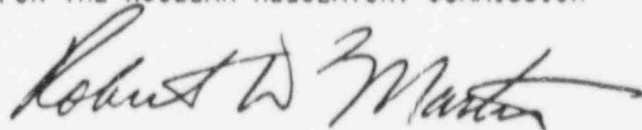
Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of the civil penalties or may protest imposition of the civil penalties in whole or in part by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalties, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1987) should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalty due which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

The responses to the Director, Office of Enforcement, noted above (Reply to a Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, and a copy to the NRC Resident Inspector, Ft. Calhoun Station.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert D. Martin  
Regional Administrator

Dated at Arlington, Texas,  
this 22<sup>nd</sup> day of February 1988.

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Omaha Public Power District

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