
Enforcement Actions: Significant Actions Resolved

Quarterly Progress Report
April - June 1988

**U.S. Nuclear Regulatory
Commission**

Office of Enforcement



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PDR NUREG
0940 R PDR

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Superintendent of Documents
U.S. Government Printing Office
Post Office Box 37082
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are available from National Technical
Information Service, Springfield, VA 22161

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April - June 1988

Manuscript Completed: August 1988
Date Published: August 1988

Office of Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555



ABSTRACT

This compilation summarizes significant enforcement actions that have been resolved during one quarterly period (April - June 1988) and includes copies of letters, Notices, and Orders sent by the Nuclear Regulatory Commission to licensees with respect to these enforcement actions. It is anticipated that the information in this publication will be widely disseminated to managers and employees engaged in activities licensed by the NRC, so that actions can be taken to improve safety by avoiding future violations similar to those described in this publication.

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ENFORCEMENT ACTIONS: SIGNIFICANT ACTIONS RESOLVED

April - June 1988

INTRODUCTION

This issue of NUREG-0940 is being published to inform NRC licensees about significant enforcement actions and their resolution for the second quarter of 1988. On April 12, 1987, the Office of Inspection and Enforcement was abolished as a result of the NRC staff reorganization. Enforcement actions are issued by the Deputy Executive Director for Regional Operations (DEDRO) and the Regional Administrator. The Director, Office of Enforcement, may act for the DEDRO in the absence of the DEDRO or as directed. Primarily emphasized are those actions involving civil penalties and Orders that have been issued by the Director of the Office of Inspection and Enforcement (now DEDRO or Director, Office of Enforcement) and the Regional Administrators.

An objective of the NRC Enforcement Program is to encourage licensees to improve their performance and, by example, the performance of the licensed industry. Therefore, it is anticipated that the information in this publication will be widely disseminated to managers and employees engaged in activities licensed by NRC, so all can learn from the errors of others, thus improving performance in the nuclear industry and promoting the public health and safety as well as the common defense and security.

A brief summary of each significant enforcement action that has been resolved in the second quarter of 1988 can be found in the section of this report entitled "Summaries." Each summary provides the enforcement action (EA) number to identify the case for reference purposes. The supplement number refers to the activity area in which the violations are classified according to guidance furnished in the U.S. Nuclear Regulatory Commission's "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988). Violations are categorized in terms of five levels of severity to show their relative importance within each of the following activity areas:

- Supplement I - Reactor Operations
- Supplement II - Facility Construction
- Supplement III - Safeguards
- Supplement IV - Health Physics
- Supplement V - Transportation
- Supplement VI - Fuel Cycle and Materials Operations
- Supplement VII - Miscellaneous Matters
- Supplement VIII - Emergency Preparedness

Part I.A of this report consists of copies of completed civil penalty or Order actions involving reactor licensees, arranged alphabetically. Part I.B includes copies of Notices of Violation that were issued to reactor licensees for a Severity Level III violation, but for which no civil penalties were assessed. Part I.C includes a copy of a Notice of Violation that was issued to a non-licensed vendor for a Severity Level III violation, but for which no civil penalty was assessed. Part II.A contains civil penalty or Order actions

involving materials licensees. Part II.B includes a copy of a Notice of Violation that has been issued to a materials licensee for a Severity Level III violation, but for which no civil penalty was assessed.

Actions still pending on June 30, 1988 will be included in future issues of this publication when they have been resolved.

SUMMARIES

I. REACTOR LICENSEES

A. Civil Penalties and Orders

Alabama Power Company, Birmingham, Alabama
(Joseph M. Farley Nuclear Plant, Units 1 and 2) Supplement I, EA 87-142

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued on November 3, 1987 based on several violations in the areas of procurement and vendor interface. The licensee responded in a letter dated December 17, 1987. After consideration of the licensee's response, the staff concluded that a violation did occur as set forth in the Notice. An Order was issued May 18, 1988 and the licensee paid the civil penalty on June 17, 1988.

Arizona Nuclear Power Project, Phoenix, Arizona
(Verde Nuclear Generating Station) Supplement I, EA 88-62

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$100,000 was issued on April 13, 1988 based on violations of requirements in two different plant disciplines: (1) improper engineering and review resulted in an inoperable turbine-driven auxiliary feedwater pump on each unit and (2) operational problems including failure to follow procedures and inadequate verification resulted in, on separate occasions, an inoperable auxiliary feedwater pump on Unit 2, an inoperable high pressure injection pump on Unit 1, and an inadvertent safety injection on Unit 2. The licensee responded and paid the civil penalties on May 13, 1988.

Arkansas Power and Light Company, Little Rock, Arkansas
(Arkansas Nuclear One, Units 1 and 2) Supplement I, EA 87-227

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 was issued on March 14, 1988 based on failure to take corrective action for a longstanding problem of containment building temperatures in excess of those assumed in the plant design basis. The base civil penalty was increased by 100% because of the duration of the violation. The licensee responded and paid the civil penalty on April 28, 1988.

Commonwealth Edison Company, Chicago, Illinois
(Zion Generating Station, Units 1 and 2) Supplement I, EA 87-211

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 was issued on January 4, 1988 based on inadequacies in the licensee's quality assurance program and management controls to ensure adequate testing of pressure isolation valves (PIVs). The base civil penalty was increased by 100% because: (1) the notice of the potential PIV problems and

the importance of an effective valve testing program, (2) the numerous instances of deficiencies in the licensee's testing procedures, and the extended duration for which these violations existed, approximately seven years. The licensee responded in a letter dated February 3, 1988. After considering the licensee's response, the staff concluded that the violation did occur and an Order Imposing a Civil Penalty was issued May 26, 1988. The licensee paid the civil penalty on June 27, 1988.

Duke Power Company, Charlotte, North Carolina
(McGuire Unit 1) Supplement I, EA 87-163

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 was issued on October 28, 1987 based on an event in which one of two required emergency diesel generators was rendered inoperable for approximately 90.5 hours. The base civil penalty was increased by 100% because of past poor performance. The licensee responded in a letter dated November 25, 1987. After considering the licensee's response, the staff concluded that the violation did occur and an Order Imposing a Civil Penalty was issued on March 3, 1988. The licensee paid the civil penalty on April 1, 1988.

Nebraska Public Power District, Columbus, Nebraska
(Cooper Nuclear Station) Supplements I and III, EA 87-237 and 88-02

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$25,000 was issued on March 14, 1988 based on an inadequate search of a contractor's vehicle that resulted in the introduction of ammunition to the protected area. The civil penalty was reduced by 50% because of the licensee's identification and reporting of the incident. The action also included an additional Notice of Violation involving a Severity Level III for inadequate design control for which a civil penalty was not proposed. The licensee responded and paid the civil penalty on April 14, 1988.

Niagara Mohawk Power Corporation, Syracuse, New York
(Nine Mile Point, Unit 1) Supplement I, EA 87-224

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 was issued on March 14, 1988 based on operation of the plant between June 1986 and September 1987 without dispositioning certain weld flaw indications which were identified by the inservice inspections conducted during the 1986 refueling outage. The base civil penalty was increased by 100% because of the licensee's prior poor performance in the area of concern. The licensee responded and paid the civil penalty on April 13, 1988.

Northeast Nuclear Energy Company, Hartford, Connecticut
(Millstone Unit 3) Supplement I, EA 88-61

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued on April 12, 1988 based on the

failure to have the required cold overpressure protection systems operable prior to and during a pressure transient in which such systems could have actuated. The licensee responded and paid the civil penalty on May 9, 1988.

Omaha Public Power District, Omaha, Nebraska
(Fort Calhoun Station) Supplement IV, EA 88-72

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$112,500 was issued on May 4, 1988 based on a number of procedural violations in the area of radiation protection including the failure to control a very high radiation area which is a repeat violation. The base civil penalty was increased by 25% for the violation involving failure to secure the door for a very high radiation area. The licensee responded and paid the civil penalties on June 3, 1988.

Public Service Electric and Gas Company, Hancocks Bridge, New Jersey
(Salem Generating Station, Unit 2) Supplement I, EA 88-44

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued March 29, 1988 based on several examples of the failure to satisfy fire protection requirements, including the separation of redundant trains of equipment, cabling, and associated circuits necessary to achieve and maintain hot shutdown in the event of a fire. The licensee responded and paid the civil penalty on April 28, 1988.

Virginia Electric and Power Company, Richmond, Virginia
(North Anna Power Station, Unit 2) Supplement I, EA 87-246

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 was issued March 8, 1988 based on a failure to place inoperable steam flow channels in trip as required by the Technical Specifications. The base civil penalty was increased by 100% because of past poor performance and lack of prompt and adequate corrective action. The licensee responded and paid the civil penalty on April 7, 1988.

B. Severity Level III Violation, No Civil Penalty

Duke Power Company, Charlotte, North Carolina
(Catawba Nuclear Station, Units 1 and 2) Supplement I, EA 88-96

A Notice of Violation was issued on June 13, 1988 based on an inadequate test program to detect the growth of asiatic clams in the inactive portion of the nuclear service water system and the failure to have operable three independent steam generator auxiliary feedwater pumps and associated flow paths during an actual turbine trip/feedwater isolation transient and resulting auxiliary feedwater system initiation. A civil penalty was not proposed because (1) the licensee's corrective action to prevent recurrence was extensive including shutdown of Unit 1 and extensive investigations of similar systems at other plants and (2) the licensee's past performance in the area had been good.

Duquesne Light Company, Shippingport, Pennsylvania
(Beaver Valley Power Station, Unit 1) Supplement I, EA 88-83

A Notice of Violation was issued April 28, 1988 based on a violation involving the required minimum number of operable high-high containment pressure channels (3) not being maintained in that two of the four channels for containment spray systems actuation and phase "B" containment isolation were inoperable because their associated bistables were in the bypassed position. A civil penalty was not proposed because (1) the violation was identified by your staff and promptly reported to the NRC and (2) the licensee's "root cause" analysis was very thorough, and corrective actions taken subsequent to that analysis was unusually prompt and extensive.

Florida Power and Light Company, Juno Beach, Florida
(St. Lucie, Unit 2) Supplement I, EA 88-117

A Notice of Violation was issued June 29, 1988 based on a violation involving the improper dispositioning of a switch which caused the bypassing of letdown isolation actuation and safety injection actuation signals to a containment isolation valve, which would have precluded its automatic closure. A civil penalty was not proposed because corrective actions to prevent recurrence were prompt and extensive and the licensee's past performance in this area has been good.

C. Non-licensed Vendor (Part 21)

Elgar Corporation, San Diego, California
Supplement VII, EA 88-129

A Notice of Violation was issued June 3, 1988 based on the failure to evaluate potentially reportable 10 CFR Part 21 deviations and design errors, or to notify its end users so they could cause an evaluation to be performed. A civil penalty was not proposed because the failure to perform the evaluation did not appear to be the result of a knowing and conscious failure to provide the required notice.

II. MATERIALS LICENSEES

A. Civil Penalties and Orders

Aztec Laboratories, Kansas City, Missouri
Supplements IV and VI, EA 87-84

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$500 was issued on June 30, 1987 based on several violations involving failure to: (1) make surveys as are reasonable under the circumstances to evaluate the extent of radiation hazards that were present after the fire, (2) report an event involving licensed material that caused damage to property in excess of \$2,000, (3) secure licensed materials in an unrestricted area from unauthorized removal, (4) test for leakage and/or contamination at intervals not to exceed six months, (5) maintain records of inventories as required, and (6) use licensed materials only at authorized locations. The licensee responded in a letter on

July 21, 1987. After consideration of the licensee's response, the staff concluded that the violations did occur and an Order Imposing the Civil Penalty was issued on September 28, 1987. The licensee responded in letters dated November 7 and 9, 1987 requesting mitigation of the civil penalty. After reviewing the response and the licensee's financial conditions, the licensee was given permission to pay in 12 monthly payments.

Eastern Testing and Inspection, Inc., Pennsauken, New Jersey
Supplements IV and V, EA 87-79

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$6,500 was issued on July 24, 1987 based on several violations involving failure: (1) to maintain an audible warning signal to a permanent radiography cell in an operable status, (2) by radiographic personnel to properly use their dosimeters, (3) by management to audit activities of certain radiographic personnel at the required frequency, and (4) to transport a radiographic source to a field site without the source being accompanied by the required shipping papers. The licensee responded in two letters dated August 21, 1987. After consideration of the licensee's responses, the staff concluded that the violations did occur but the penalties were reduced by 50% because of the licensee's inability to pay. An Order Imposing the civil penalties in the amount of \$3,250 was issued on October 20, 1987, and the licensee was given permission to pay in 24 monthly payments.

Finlay Testing Laboratories, Inc., Aiea, Hawaii
Supplements IV, V, and VI, EA 87-185 and EA 88-69

An Order Suspending License (Effective Immediately) was issued on September 21, 1987. The Order was based on findings that the licensee transported licensed material on passenger carrying aircraft and failed to maintain proper records concerning use of licensed material. The licensee requested a hearing on November 18, 1987. The inspection and investigation revealed additional significant violations of transportation and safety program requirements and on April 11, 1988 an Order Continuing Suspension of License and Order to Show Cause why License Should not be Revoked and a Notice of Violation were issued. In response to the Revocation Order the licensee withdrew application for a hearing and agreed to a termination of the license. A Settlement Agreement was signed on May 23, 1988.

Froehling and Robertson, Inc., Richmond, Virginia
Supplements V and VI, EA 87-128

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$5,000 was issued November 6, 1987 based on violations involving failure to: (1) administer periodic or refresher training, (2) conduct quarterly inspections of all operations in the RSO's area of responsibility, (3) reevaluate the overall Radiological Safety Program at least quarterly, (4) return film badges monthly for measurement, and (5) use applicable shipping labels when shipping radioactive material. The licensee responded in letters dated December 1, 1987.

After consideration of the licensee's responses, the staff concluded that two of the violations should be withdrawn. An Order Imposing a Civil Penalty in the amount of \$4,200 was issued on April 5, 1988. The licensee paid the civil penalty on April 14, 1988.

Joslin Diabetes Center, Inc., Boston, Massachusetts
Supplements IV and VI, EA 88-54

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$2,500 was issued on April 5, 1988 based on several violations including a cumulative radiation exposure of 35.13 rem to the right hand of a research investigator during the fourth calendar quarter of 1987. The licensee responded in a letter dated April 28, 1988. After consideration of the licensee's response, the staff concluded that a sufficient basis existed for a 75% mitigation of the civil penalty. An Order Imposing a Civil Penalty in the amount of \$625 was issued on June 13, 1988. The licensee responded and paid the civil penalty on June 15, 1988.

Micromedic Systems, Inc., Horsham, Pennsylvania
Supplements IV and VI, EA 87-241

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$500 was issued on March 29, 1988 based on improper disposal of radioactive waste materials and three examples of the failure to perform adequate surveys as required at the facility. The licensee responded and paid the civil penalty on April 27, 1988.

Osage Wireline Service, Cleveland, Oklahoma
Supplements IV, V, and VI, EA 87-178

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$1,500 was issued on December 27, 1987 based on numerous radiation safety violations including: (1) individuals handling radioactive sources without the benefit of tools, (2) failure to perform radiation surveys at job sites, (3) failure to maintain records of inventories of radioactive sources, (4) failure to secure radioactive sources from unauthorized removal, and (5) failure to maintain complete records of personnel monitoring results. The licensee responded in letters dated January 28, 1988. After consideration of the licensee's response, the staff concluded that one violation should be withdrawn and the civil penalty be reduced by \$50. An Order Imposing a Civil Penalty in the amount of \$1,450 was issued on May 27, 1988. The licensee paid the civil penalty on June 29, 1988.

Professional Service Industries, Inc., Lombard, Illinois
Supplement VI, EA 88-93

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$500 was issued on May 19, 1988 based on the failure to secure a moisture density gauge during transport which resulted in the temporary loss of the gauge after it fell onto a public road from the back of the licensee's vehicle. The licensee responded and paid the civil penalty on June 17, 1988.

Riverton Memorial Hospital - Health Trust, Inc., Riverton, Wyoming
Supplement VI, EA 88-107

An Order Modifying License and Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$5,000 was issued on June 3, 1988 based on unauthorized use of licensed material, failure to instruct individuals, and various other violations, four of which were repeats of the previous inspection findings. The base civil penalty was increased by 100% due to inadequate corrective actions and poor prior performance. The Order Modifying License required the licensee to notify NRC of personnel terminations and obtain an independent consultant to assess the program and perform audits. The licensee responded and paid the civil penalty on June 23, 1988.

Southern Ohio Coal Company, Athens, Ohio
Supplement VI, EA 88-118

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$750 was issued on May 27, 1988 based on the licensee's failure to: (1) maintain adequate control over a device containing a millicurie cesium-137 radioactive source and (2) conduct a physical inventory every six months to account for the radioactive source. As a result of these failures, the radioactive source may have been lost into the public domain. The base civil penalty was increased by 50% because the corrective actions, after identification of the loss, were not promptly initiated and were only minimally acceptable. The licensee responded and paid the civil penalty on June 16, 1988.

St. Louis University, St. Louis, Missouri
Supplement IV, EA 87-234

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$6,000 was issued on January 29, 1988 based on actions involving: (1) permitting an individual to receive a whole body dose of at least 7.5 rem during the fourth calendar quarter of 1987, (2) failing to assess the radiation hazards or observe three separate warning lights which would have alerted the individuals, prior to entering the room, that the 8900 curie cobalt-60 teletherapy source was in an exposed position, and (3) failing to report to the NRC within 24 hours that an overexposure event had occurred. A Severity Level II was proposed and the base civil penalty was increased by 50% because the licensee's corrective actions were not prompt and were only minimally acceptable. The licensee responded in a letter dated February 16, 1988. After considering the licensee's response, the staff concluded that the violations did occur and an Order Imposing a Civil Penalty was issued on May 3, 1988. The licensee paid the civil penalty on June 15, 1988.

B. Severity Level III Violation, No Civil Penalty

Veterans Administration Medical Center, Buffalo, New York
Supplement IV, EA 88-115

A Notice of Violation was issued on May 26, 1988 based on a radiation exposure to the left hand and to the skin on the back of the neck

of a senior investigator from the State University of New York at Buffalo, performance of surveys at a frequency less than required, transfer and use of material in an unauthorized manner, administration of a dose of radioactive materials to a patient without first assaying the dose in the dose calibrator to confirm its contents, and failure to wipe test packages of technetium-99m. A civil penalty was not proposed because the licensee promptly identified and reported the overexposure as well as taking prompt and extensive corrective actions.

I.A. REACTOR LICENSEES, CIVIL PENALTIES AND ORDERS



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

NOV 03 1987

Docket Nos. 50-348 and 50-364
License No. NPF-2 and NPF-8
EA 87-142

Alabama Power Company
ATTN: Mr. R. P. McDonald
Senior Vice President
P. O. Box 2641
Birmingham, AL 35291-0400

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC INSPECTION REPORT NOS. 50-348, 364/87-11 AND 50-348, 364/87-14)

This refers to the inspections conducted on May 11-22, June 1-5, and June 11 - July 10, 1987, at the Farley Nuclear Plant. The inspections included the review of the implementation of your procurement and vendor interface program. The reports documenting these inspections were sent to you by letter, dated July 27 and July 30, 1987. As a result of these inspections, failures to comply with the NRC regulatory requirements were identified. On September 3, 1987, an Enforcement Conference was held with you and members of your staff in the Region II office to discuss these violations, their causes, and your corrective actions. The report documenting this conference was sent to you by letter dated October 5, 1987.

The violations associated with Sections I.A and I.B involve a number of examples of inadequate control and installation of purchased equipment. Section I.A relates to the installation of nine commercial grade circuit breakers into safety-related motor control centers (MCC). The breakers were purchased with a rating of 480-V; however, they were installed in 600-V MCCs. The installation of these breakers without proper evaluation reflects a weakness in your program to assure that material and equipment conform to procurement requirements. Section I.B demonstrates a lack of design control by citing a number of examples where commercial grade parts were incorrectly installed in safety-related equipment and applications. Together these violations illustrate a significant weakness in management oversight in the area of procurement.

The violations associated with Sections II.A and II.B involve a number of examples of inadequate corrective actions and improper inspection of safety-related installations. Collectively, these examples indicate a lack of management attention to activities involving vendor information, control of equipment installed in the plants and a general lack of aggressive adherence to certain requirements of 10 CFR Part 50, Appendix B. The five examples cited in Section II.A involve safety-related components that were potentially inoperable or dependent on control documents that were not updated for over two years due to the inadequate inspection and followup of vendor notifications. Section II.B indicates poor control of inspection activities in that safety-related battery racks were improperly installed and inspections failed to discover obvious deficiencies.

NOV 03 1987

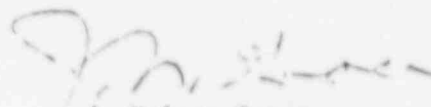
To emphasize the need to properly procure and inspect parts and equipment used in safety-related applications, I have been authorized after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Fifty Thousand Dollars (\$50,000) for the violations described in the enclosed Notice. The violations described in the enclosed Notice have been categorized as two Severity Level III problems. The base civil penalty for a Severity Level III problem is \$50,000. The escalation and mitigation factors in the Enforcement Policy were considered. Each civil penalty was mitigated 50 percent because of prior good performance. Full mitigation was not deemed appropriate because of the extent of the weakness in management controls in the general area of procurement demonstrated by the number of examples cited.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. In addition, you should address the weaknesses in the different disciplines that allowed the plant to operate with commercial grade components without adequately evaluating their suitability for safety-related applications. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL No. 96-511.

Sincerely,



J. Nelson Grace
Regional Administrator

Enclosure:
Notice of Violation and
Proposed Imposition of
Civil Penalty

cc w/encl:
W. O. Whitt, Executive Vice President
J. D. Woodard, General Manager -
Nuclear Plant
W. G. Hairston, III, Vice President
Nuclear Support
J. W. McGowan, Manager-Safety Audit
and Engineering Review
J. K. Osterholtz, Supervisor-Safety
Audit and Engineering Review

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Alabama Power Company
Joseph M. Farley Nuclear Plant
Units 1 and 2

Docket Nos. 50-348 and 50-364
License Nos. NPF-2 and NPF-8
EA 87-142

During the Nuclear Regulatory Commission (NRC) inspections conducted on May 11-22, June 1-5, and June 11-July 10, 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 two civil penalties 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:

I. Inadequate Control and Installation of Purchased Equipment

- A. 10 CFR Part 50, Appendix B, Criterion VII, Control of Purchased Material, Equipment, and Services, requires that measures be established to assure that purchased material, equipment, and services conform to the procurement documents. These measures shall include provisions, as appropriate, for source evaluation and selection, objective evidence of quality furnished by the contractor or subcontractor, and inspection at the source. Documentary evidence that material and equipment conform to the procurement requirements is required to be available at the nuclear power plant prior to installation or use of such material and equipment.

Contrary to the above, at the time of the inspections, the licensee had nine circuit breakers with unconfirmed seismic qualification and voltage ratings installed in safety-related motor control centers at Farley Nuclear Plant Units 1 and 2. The circuit breakers were sold by Satin American Corporation as seismically qualified safety-related circuit breakers acceptable for installation into 600-V motor control centers. The vendor provided inadequate justification for seismic and 600-V qualification. No testing or analysis that would qualify the use of these breakers as installed had been done either by the licensee or the vendor. Moreover, although the vendor represented that the circuit breakers were fully qualified for 600-V applications, the licensee should have been alerted to a possible problem since the breakers were still affixed with an Underwriters Laboratories, Inc. rating of 480-V.

- B. 10 CFR Part 50, Appendix B, Criterion III, Design Control, requires that measures be established to assure that applicable regulatory requirements and the design basis for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions. It also requires that measures be established for the selection and review for suitability of materials, parts, equipment, and processes that are essential to the safety-related functions of structures, systems and components.

Contrary to the above, the licensee installed a number of commercial grade parts at Farley Nuclear Plant Units 1 and 2 without adequately evaluating their suitability for use in safety-related applications. These parts were in use at the time of the inspections indicated above. Specifically:

1. Commercial grade circuit breakers were installed into safety-related motor control centers 1U and 2U.
2. A commercial grade "Namco" limit switch was installed as a replacement for safety-related switch for the accumulator tank isolation valve.
3. A commercial grade torque switch was installed into a safety-related Limatorque motor actuator. Limatorque has stated that although the safety-related and commercial grade torque switches for outside containment are the same, the switches ordered as safety-related received additional quality assurance checks at Limatorque that were not performed on the commercial grade switches. There was no evidence that the licensee made additional quality assurance checks on the torque switch.
4. Commercial grade hinge pin bushings were installed in safety-related Anchor/Darling tilting disk check valves in the auxiliary feedwater system.
5. A commercial grade Agastat timing relay (ATR) was installed as a replacement in safety-related panel #Q2R16B007-B, 600-V load distribution panel. Additionally, commercial grade ATRs were found in other safety-related electrical enclosures including two ATRs in diesel generator load sequencer panel #Q2R43E501B-B, and two ATRs in diesel generator relay terminal box #Q1R43E506-B.

Collectively, these violations have been evaluated as a Severity Level III problem (Supplement I).

Cumulative Civil Penalty - \$25,000 (assessed equally between the violations).

II. Inadequate Corrective Actions and Inspections

- A. 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, requires that measures be established to assure that conditions adverse to quality, such as failures, defective material and equipment, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, measures are required to assure that the cause of the condition is determined and corrective action is taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken are also required to be documented and reported to appropriate levels of management.

Contrary to the above, the inspectors identified five instances where at the time of the inspections, the licensee had failed to take adequate corrective action:

1. A 10 CFR Part 21 notification by the Henry Pratt Company in May 1985 detailed problems with Pratt valves using Limitorque operators. This problem was not correctly or completely dispositioned in that seven valves were determined to be defective after the NRC inspection.
 2. A 10 CFR Part 21 notification by the Anchor/Darling Valve Company in June 1985 detailed failures with tilting disk check valve hinge pin bushings. This problem was not completely dispositioned in that only check valves in the Auxiliary Feedwater System were inspected. Other safety-related systems were not inspected.
 3. A Colt Industries Service Information Letter (SIL), A-2, dated February 1985, entitled "Blower Installation," was evaluated by the licensee, but not all the corrective actions determined to be appropriate by the Alabama Power Company engineering review were implemented in that SIL A-2, which gives service instructions, was never placed in the Colt Industries Emergency Diesel controlled vendor manual.
 4. Maintenance Work Request Nos. 44439 and 67875, which have implemented corrective actions to the four control room fire damper electrical circuits to ensure that the circuits would function as desired, were not completed.
 5. In April 1986, the licensee identified cracks in a number of cells of the safety-related station batteries. Despite the fact that NRC Information Notice 84-83 identified that such conditions can be caused by the use of hydrocarbon-based solvents for cleaning purposes, the licensee had not updated one of three pertinent electrical maintenance procedures to address the problem.
- B. 10 CFR Part 50, Appendix B, Criterion X, Inspection, as implemented by Section 17 of the Final Safety Analysis Report and the Joseph M. Farley Operations Quality Assurance Policy Manual, requires that inspection of activities affecting quality be established and executed to verify conformance with the documented instructions, procedures, and drawings for accomplishing the activity.

Contrary to the above, on June 2, 1987, both Train B, 125-V Service Water (SW) battery racks, were found to be improperly installed and mounted creating an unanalyzed condition concerning seismic qualification. Specifically, the concrete anchor bolt nuts on all Train B battery rack anchors were backed off and used as leveling nuts for the rack, thus providing no preload on the concrete anchors. The battery racks were improperly installed in the SW Train B battery room approximately one year prior to this inspection and remained in this unanalyzed condition until it was identified by the NRC inspector on June 2, 1987.

Collectively these violations have been evaluated as a Severity Level III problem (Supplement I).

Cumulative Civil Penalty - \$25,000 (assessed equally between the violations).

Notice of Violation

- 4 -

Pursuant to the provisions of 10 CFR 2.201, Alabama Power Company (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 violation: (1) admission or denial of the 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 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 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 amount of the civil penalties proposed above, 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 penalty, 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, such answer may request remission or mitigation of the penalties.

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 penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

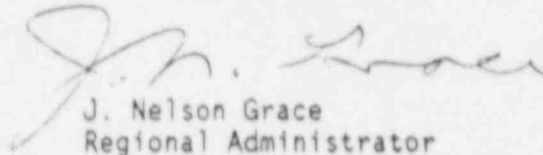
The responses to the Director, Office of Enforcement, noted above Reply to a Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation should be addressed to: Director, Office of Enforcement,

Notice of Violation

- 5 -

U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region II, and the NRC Resident Inspector at Farley.

FOR THE NUCLEAR REGULATORY COMMISSION



J. Nelson Grace
Regional Administrator

Dated at Atlanta, Georgia
this *3rd* day of November 1987



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 18 1988

Docket Nos. 50-348 and 50-364
License Nos. NPF-2 and NPF-8
EA 87-142

Alabama Power Company
ATTN: Mr. R. P. McDonald
Senior Vice President
Post Office Box 2641
Birmingham, Alabama 35291-0400

Gentlemen:

SUBJECT: ORDER IMPOSING A CIVIL MONETARY PENALTY

This refers to your letters dated December 17, 1987, in response to the Notice of Violation and Proposed Imposition of Civil Penalties (Notice) sent to you by our letter dated November 3, 1987, and in response to NRC Inspection Report Nos. 50-348/87-11 and 50-364/87-11 sent to you by our letter dated July 27, 1987. Our letter and Notice described two Severity Level III problems regarding the implementation of your procurement and vendor interface program. These problems involved a number of violations regarding inadequate control and installation of purchased equipment and a number of examples of inadequate corrective actions and improper inspection of safety-related installations. To emphasize the need to properly procure and inspect parts and equipment used in safety-related applications, a total civil penalty of Fifty Thousand Dollars (\$50,000) was proposed, Twenty-Five Thousand Dollars (\$25,000) for each Severity Level III problem.

In your initial response, you protested the issuance of violation II.A.4; denied violations I.A, I.B.5 (in part), II.A.2, and II.A.5; admitted the remaining violations; and presented mitigating circumstances for violations I.B.1, II.A.1, II.A.3, and II.B. You also requested recategorization of individual findings (as separate violations rather than aggregate violations), reduction of the severity level, and withdrawal of the proposed civil penalties. In your second response, you presented arguments regarding inaccuracies in the above referenced inspection report.

The NRC staff has reviewed the purported inspection report inaccuracies that you documented and commented on in the enclosure to your letter dated December 17, 1987. The information used in the report, such as numbers of circuit breakers installed and other such discrepancies reflected current information at the time of the exit meeting and subsequent adjustment of the numbers would not affect the significance of violations as written. Most of the other inaccuracies identified in your December 17, 1987 letter dealt with Alabama Power Company's interpretation of the inspection report findings, observations, and comments.

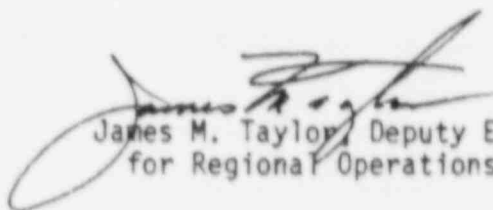
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The purported inaccuracies associated with the Notice of Violation items are addressed in the Appendix to the Order. The NRC staff finds that none of these inaccuracies affect the Severity Level of the violations in the Notice of Violation and Proposed Imposition of Civil Penalties.

After careful consideration of your response to the Notice of Violation and Proposed Imposition of Civil Penalties, the NRC staff concluded for the reasons given in the Appendix attached to the enclosed Order Imposing Civil Monetary Penalty, that three of nine examples of violation I.A, the relay terminal box Q1R43E506-B example of violation I.B.5, and one example of violation II.A should be withdrawn. The remaining examples of Violations I.A, I.B.5, II.A, and the other violations in their entirety are considered to have occurred as stated in the Notice and to have sufficient safety significance to warrant two Severity Level III violations. Additionally, an adequate basis was not provided to warrant either recategorization of the violations, reduction of the severity level, or withdrawal of the proposed civil penalties. Although three of nine examples of violation I.A, one example of violation I.B.5, and one example of violation II.A have been withdrawn, these examples were not considered to be major contributors to the enforcement action taken. Accordingly, the NRC staff hereby serves the enclosed Order on Alabama Power Company imposing a civil monetary penalty in the amount of Fifty Thousand Dollars (\$50,000). The effectiveness of your corrective actions will be reviewed during a subsequent inspection.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

Sincerely,



James M. Taylor, Deputy Executive Director
for Regional Operations

Enclosure:
Order Imposing Civil Monetary
Penalty with Appendix

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of
ALABAMA POWER COMPANY
Farley Nuclear Plant

)
)
)

Docket Nos. 50-348 and 50-364
License Nos. NPF-2 and NPF-8
EA 87-142

ORDER IMPOSING CIVIL PENALTY

I

Alabama Power Company (licensee) is the holder of Operating License Nos. NPF-2 and NPF-8 issued by the Nuclear Regulatory Commission (NRC/Commission) on June 25, 1977 and March 31, 1981, respectively. The licenses authorize the licensee to operate Joseph M. Farley Nuclear Plant Units 1 and 2 in accordance with the conditions specified therein.

II

Inspections of the licensee's activities were conducted on May 11-22, June 1-5, and June 11 - July 10, 1987. The results of these inspections indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalties (Notice) was served upon the licensee by letter dated November 3, 1987. The Notice states the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalties proposed for the violations. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalties by two letters, both dated December 17, 1987.

III

After consideration of the licensee's responses and the statements of facts, explanation and arguments for mitigation contained therein, the Deputy Executive

Director for Regional Operations has determined, as set forth in the Appendix to this Order, that three examples of violation I.A, one example of violation I.B.5, and one example of violation II.A should be withdrawn; that the remaining examples of violations I.A, I.B.5, and II.A and the remaining violations in their entirety occurred as stated; that the violations were properly categorized in the aggregate as two Severity Level III problems; and that the penalties proposed for the violations designated in the Notice of Violation and Proposed Imposition of Civil Penalties should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of Fifty Thousand Dollars (\$50,000) within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing should be clearly marked as a "Request for an Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington,

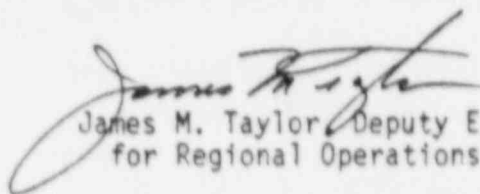
D.C. 20555, with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector, Farley Nuclear Plant.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

- (a) whether the licensee was in violation of the Commission's requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties referenced in Section II and modified in Section III above, and
- (b) whether, on the basis of such violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Rockville, Maryland
this 18th day of May 1988

APPENDIX

EVALUATIONS AND CONCLUSIONS OF RESPONSE TO NOTICE OF VIOLATION

On November 3, 1987, a Notice of Violation and Proposed Imposition of Civil Penalties (Notice) was issued for violations identified during NRC inspections. This Notice contained two Severity Level III problems each assessed a Twenty-Five Thousand Dollar (\$25,000) civil penalty. Alabama Power Company (APC) responded to the Notice by two letters, both dated December 17, 1987. In its first response, the licensee protested the issuance of Violation II.A.4, denied violations I.A, I.B.5 (in part), II.A.2, and II.A.5; admitted the remaining violations; and presented mitigating circumstances for violations I.B.1, II.A.1, II.A.3, and II.B. The licensee also requested recategorization of individual findings (as separate violations rather than aggregate violations), reduction of the severity level, and withdrawal of the proposed civil penalties. In its second response, the licensee presented arguments regarding inaccuracies in Inspection Report Nos. 50-348/87-11 and 50-364/87-11. The NRC's evaluations and conclusions regarding the licensee's initial response are as follows:

Restatement of Violation I.A

I. Inadequate Control and Installation of Purchased Equipment

- A. 10 CFR Part 50, Appendix B, Criterion VII, Control of Purchased Material, Equipment, and Services, requires that measures be established to assure that purchased material, equipment, and services conform to the procurement documents. These measures shall include provisions, as appropriate, for source evaluation and selection, objective evidence of quality furnished by the contractor or subcontractor, inspection at the contractor or subcontractor source and examination of products upon delivery. Documentary evidence that material and equipment conform to the procurement requirements is required to be available at the nuclear power plant prior to installation or use of such material and equipment.

Contrary to the above, at the time of the inspections, the licensee had nine circuit breakers with unconfirmed seismic qualification and voltage ratings installed in safety-related motor control centers at Farley Nuclear Plant (FNP) Units 1 and 2. The circuit breakers were sold by Satin American Corporation as seismically qualified safety-related circuit breakers acceptable for installation into 600-V motor control centers. The vendor provided inadequate justification for seismic and 600-V qualification. No testing or analysis that would qualify the use of these breakers as installed had been done either by the licensee or the vendor. Moreover, although the vendor represented that the circuit breakers were fully qualified for 600-V applications, the licensee should have been alerted to a possible problem since the breakers were still affixed with an Underwriters Laboratories, Inc. rating of 480-V.

Summary of Licensee's Responses to Violation I.A

Prior to allowing Satin American to supply the needed breakers, APC reviewed the Satin American Quality Assurance Program and found it acceptable. APC efforts to upgrade the 480-V breakers to 600-V standards and to resolve potential seismic qualification problems involved Siemens-ITE, Ecotech,

Telemecanique and Bechtel. The efforts by APC and the companies listed above included both testing and analysis. Therefore, APC concluded that the NRC's assertion that "No testing or analysis that would qualify the use of these breakers as installed had been done either by the licensee or vendor" is not correct.

APC additionally objected to the NRC's statement that "...the licensee should have been alerted to a possible problem since the breakers were still affixed with an Underwriters Laboratories, Inc. rating of 480-V." APC stated that it is not aware of any regulatory requirement to maintain a UL listing for these breakers. Finally, the licensee contended that the number of breakers that were installed in safety-related applications was six rather than the nine cited by the NRC in the Notice of Violation.

NRC Evaluation of Licensee Response to Violation I.A

At the exit meeting conducted at the end of the subject inspection, the NRC inspectors were told there were nine circuit breakers installed in safety-related motor control centers. If six is the correct number, the NRC staff agrees that reference to three of the nine original breakers should be withdrawn. However, the remaining six examples occurred as stated and the significance of the subject violation would not be changed.

The NRC staff was aware of and considered the circumstances surrounding the procurement of the subject breakers as described in paragraph A of the APC response to the subject violation. The staff has reviewed and considered the activities performed after the inspection as described in paragraph B of the subject response. The testing performed by Satin American and by APC was recognized and evaluated by the NRC. It was determined that this testing did not serve as a basis for ensuring the breakers would meet the applicable design requirements for the installed applications. Specifically, Bechtel specification SS-1102-61 for 600 volt, 480 volt, and 208 volt Motor Control Centers, used in the procurement of the original MCCs and breakers installed at the FNP, states in paragraph 6.1.3 that the 600-V circuit breakers should be capable of interrupting 18,000 amps rms symmetrical at 600 volts. The original supplied breakers were rated by UL as being capable of meeting this specification. To achieve this UL rating, a manufacturer is required to subject a production sample of breakers through vigorous testing performed on a quarterly basis. This testing includes subjecting the breakers to the rated interrupting current at the rated voltage (in this case 18,000 amps at 600 volts). This testing, performed on sample breakers, then serves as the basis for the UL rating associated with the other breakers manufactured during the same time period.

The circuit breakers received by FNP were UL rated for 480-V, not 600-V. Therefore, these were part of manufacturing lots subjected to testing at 480-V. No breakers manufactured during the same time period as those received by FNP were ever tested at 600-V, as would be necessary to establish an interrupting rating at 600 volts. Subsequent tests performed by Satin American and APC did not establish nor ensure that the subject breakers could interrupt 18,000 amps at 600 volts, as required by the Bechtel specification.

The staff agrees that the breakers installed at FNP are not required to have a UL rating, but in this case the UL rating served as the only assurance that the

subject breakers could meet the design specifications. Additionally, information received from Seimens and from Telemecanique has reinforced the staff's position that the subject breakers are in fact not identical to the originally qualified 600 volt breakers. In the time period reviewed by the NRC inspectors (July 1984 - June 1986) manufacturing and material changes were made to the type of breakers in question but, these changes were not evaluated for their possible effect on the 600 volt interrupting rating.

Appendix B to 10 CFR Part 50 provides the overall criteria for quality assurance programs for nuclear power plants in an effort to, among other things, provide a higher level of assurance that safety-related equipment and components are suitable for their application and will perform their intended safety function that is normally obtained with a typically commercially available off-the-shelf item. In this case, however, the 600 volt circuit breakers did not even benefit from the assurance of quality associated with a typical commercial grade quality assurance program (in this case UL) since they were not manufactured in a lot which was subject to "UL Proof Testing" at 600 volts. Consequently, APC started with a product that did not satisfy typical commercial grade testing requirements and then upgraded it to "nuclear grade" without performing equivalency tests or providing a technical basis for not doing them.

As detailed in the preceding paragraphs, based upon the information available at the time of the inspection, and with the additional knowledge obtained after completion of the inspection, the NRC staff has not seen nor does the staff know of existing documentation that would support qualification of the subject breakers for 600 volt applications. The NRC staff is concerned that APC, after thoroughly reviewing this issue and removing the subject breakers from safety-related applications, still has not addressed the technical adequacy of the available documentation as necessary to establish 600-V interrupting capabilities of the breakers. The staff considers Violation I.A valid as written for the six circuit breakers installed into the safety-related Motor Control Centers.

Restatement of Violation I.B.1

I. Inadequate Control and Installation of Purchased Equipment

- B. 10 CFR Part 50, Appendix B, Criterion III, Design Control, requires that measures be established to assure that applicable regulatory requirements and the design basis for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions. It also requires that measures be established for the selection and review for suitability of materials, parts, equipment, and processes that are essential to the safety-related functions of structures, systems, and components.

Contrary to the above, the licensee installed a number of commercial grade parts at Farley Nuclear Plant Units 1 and 2 without adequately evaluating their suitability for use in safety-related applications. These parts were in use at the time of the inspections indicated above. Specifically:

1. Commercial grade circuit breakers were installed into safety-related motor control centers 1U and 2U.

Summary of Licensee's Response to Violation I.B.1

APC admitted that the decision to procure the items commercial grade did not include documented evaluation or dedication of parts procured as commercial grade for use in safety-related applications and that no documented evaluation/dedication was done prior to installation. However, the licensee asserted that pre-installation trip tests were performed at the time of installation.

The licensee's reason for the violation was that inadequate procedural guidance resulted in the failure to document fully evaluation of the suitability of commercial grade parts for installation in safety-related applications. The breakers were removed from service.

NRC Evaluation of Licensee's Response to Violation I.B.1

Although a pre-installation trip test may have been performed at the time of installation, no analysis or documentation existed that would show the similarity of the procured breakers to the original breakers installed in the motor control centers. Therefore, an adequate evaluation of suitability for use in safety-related applications was not performed.

Restatement of Violation I.B.5I. Inadequate Control and Installation of Purchased Equipment

- B. 10 CFR Part 50, Appendix B, Criterion III, Design Control, requires that measures be established to assure that applicable regulatory requirements and the design basis for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions. It also requires that measures be established for the selection and review for suitability of materials, parts, equipment, and processes that are essential to the safety-related functions of structures, systems, and components.

Contrary to the above, the licensee installed a number of commercial grade parts at FNP Units 1 and 2 without adequately evaluating their suitability for use in safety-related applications. These parts were in use at the time of the inspections indicated above. Specifically:

5. A commercial grade Agastat timing relay (ATR) was installed as a replacement in safety-related panel #Q2R16B007-B, 600-V load distribution panel. Additionally, commercial grade ATRs were found in other safety-related electrical enclosures including two ATRs in diesel generator load sequencer panel #Q2R43E501B-B, and two ATRs in diesel generator relay terminal box #Q1R43G506-B.

Summary of Licensee's Response to Violation I.B.5

APC admitted that at the time of installation of the ATRs, it did not have documented evaluation or dedication of the ATR for safety-related use in the load distribution panel #Q2R16B007-B. However, the portion of the alleged violation associated with commercial grade ATRs in diesel generator load

sequencer panel #Q2R43E501B-B and two ATRs in diesel generators relay terminal box #Q1R43G506-B was denied because the ATRs were part of the original equipment supplied with the panel and were therefore qualified by the vendor.

NRC Evaluation of Licensee's Response to Violation I.8.5

As originally stated, commercial grade ATRs were found in other safety-related electrical enclosures, including two relays in diesel generator load sequencer panel Q2R43G501-B and two relays in diesel generator relay terminal box Q1R43E506-B. While the NRC staff agrees with the licensee's conclusion that the relays found in relay terminal box Q1R43G506-B were part of the original equipment, the staff disagrees with the licensee's conclusion for load sequencer Q2R43E501B-B and APC's verification methodology, that appears to be based solely on a document review of maintenance work requests (MWR) and material issue forms (MIF). The NRC staff bases its disagreement on the following two points:

1. Deviations were noted in the APC document control, as discussed in Section 6.A, B, C, and D of the NRC inspection report. One example concerned a commercial grade circuit breaker that was withdrawn under a MIF but was installed in a safety-related system without a MWR (Reference 6.D.(2)).
2. A comparison of relay serial numbers revealed that two additional relays found in sequencer panel Q2R43E501B-B were manufactured in the same week of 1979, which is after Unit 1 started power operations.

Serial #79091355: 1,355th relay manufactured in the 9th week of 1979
(FNP device 2-2J)

Serial #79091379: 1,379th relay manufactured in the 9th week of 1979
(FNP device 2-1J)

Additionally, one of the relays in the Unit 2 sequencer panel was also manufactured in the same week as those above.

Serial #79091380: 1,380th relay manufacture in the 9th week of 1979.

While the staff agrees that the relay terminal box Q1R43G506-B example of this violation should be withdrawn, it was concluded that your review of the remaining issues was inadequate. It would appear that relays 79091355 and 79091380 were replaced subsequent to plant startup, without using the MWR or MIF processes, since the licensee's review based on using these documents did not identify these relays as being replaced after start-up. Therefore, the remaining examples of this violation occurred as stated. NRC records will be adjusted accordingly.

Restatement of Violation II.A.1

II. Inadequate Corrective Actions and Inspections

- A. 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, requires that measures be established to assure that conditions adverse to quality, such as failures, defective material and equipment, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, measures are required

to assure that the cause of the condition is determined and corrective action is taken to preclude repetition. The identification of the significant conditions adverse to quality, the cause of the condition, and the corrective action taken are also required to be documented and reported to appropriate levels of management.

Contrary to the above, the inspector identified five instances where at the time of the inspections, the licensee had failed to take adequate corrective action:

1. A 10 CFR Part 21 notification by the Henry Pratt Company in May 1985 detailed problems with Pratt valves using Limitorque operators. This problem was not correctly or completely dispositioned in that seven valves were determined to be defective after the NRC inspection.

Summary of Licensee's Response to Violation II.A.1

APC admitted that the problem was not completely resolved but asserted that all seven affected valves were determined to be operable in the "as found" condition.

NRC Evaluation of Licensee Response to Violation II.A.1

Although all seven valves were determined to be operable, their condition was shown to be degrading as evidenced by slippage of 3/4 of an inch of the spline adaptor of one of the valves. The degraded state of the valves, along with licensee's admission that the problem was not completely resolved, clearly indicated a lack of effective corrective action and therefore the violation is correct as written.

Restatement of Violation II.A.2

(See II.A.1 above for full restatement of violation)

- II.A.2. A 10 CFR Part 21 notification by the Anchor/Darling Valve Company in June 1985 detailed failures with tilting disk check valve hinge pin bushings. This problem was not completely dispositioned in that only check valves in the Auxiliary Feedwater System were inspected. Other safety-related systems were not inspected.

Summary of Licensee's Response to Violation II.A.2

APC denied this violation and stated that the AFW valves were the only safety-related valves installed in Farley Nuclear Plant requiring inspection as a result of the 10 CFR Part 21 notification.

NRC Evaluation of Licensee Response to Violation II.A.2

The written and verbal information provided by the licensee at the time of the inspection [i.e., (1) Nuclear Generation Maintenance Memorandum dated May 13, 1987, from L. S. Ward to R. M. Coleman regarding Problem Report No. 7-122 Anchor Darling Tilting Disc Check Valves and (2) System Performance Group Problem Report No. 7-122 dated October 3, 1985, regarding Anchor Darling

Tilting Disc Check Valves with Tack Welded Bushings] indicated that other valves in safety-related systems may have been affected and that the inspections/work was never performed. The NRC staff does not disagree that the subject valves were only in the auxiliary feedwater system but, the licensee did not know this at the time of the inspection. The evaluation/disposition of other systems was not completed until after the problem was identified by the inspectors (post inspection) nearly two years after receipt of the Part 21 notification and approximately four years after the event (hinge pin failure) occurred at Farley Nuclear Plant. Also, the information provided by System Performance Group Problem Report, dated October 3, 1985 states, in part that, "...additional Anchor Darling T.D.C.s with tack welded bushings are installed in the plant." The valves potentially affected were prefixed with a Q, a designator used previously for safety-related equipment. These valves were in addition to the valves in the Auxiliary Feedwater System and partly formed the basis for the statement in the inspection report. APC did not demonstrate at the time of the inspection that no other valves were located in safety-related systems. It was merely fortuitous that, in fact, the valves in the Auxiliary Feedwater System turned out to be the only valves of concern in safety-related systems. APC did not appropriately pursue this issue at the time of the event, or at the time of the Part 21 notification. Therefore, this violation occurred as stated.

Restatement of Violation II.A.3

(See II.A.1 above for full restatement of violation)

II.A.3. A Colt Industries Service Information Letter (SIL), A-2, dated February 1985, entitled "Blower Installation," was evaluated by the licensee, but not all the corrective actions determined to be appropriate by the APC engineering review were implemented in that SIL A-2, which gives service instructions, was never placed in the Colt Industries Emergency Diesel controlled vendor manual.

Summary of Licensee Response to Violation II.A.3

APC admitted that the instance occurred as described but considered that the actions taken in response to this SIL were adequate to assure operability. The licensee asserted that a Colt Service Information Letter, SIL A-2, was issued on February 18, 1985, concerning precautions regarding blower installation procedures for Model 38TD8-1/8 diesels. This SIL was received and evaluated in accordance with FNP procedures for evaluation of vendor technical information. A Problem Report was issued on March 29, 1985, recommending that the SIL be entered in the diesel generator instruction manual. Verification that the SIL had been entered in the manual was received on August 29, 1985; however, no update to the manual was actually made due to personnel error.

NRC Evaluation of Licensee Response to Violation II.A.3

The fact that the SIL was not entered into the manual is an example where vendor supplied information was evaluated; however, adequate and complete corrective action was not taken. In this case the action to be taken was to insert the SIL into the appropriate manual. The fact that this action was not performed was the basis of the violation. The NRC staff recognizes that

corrective action was taken in that the diesel generators were appropriately inspected. However, without the inclusion of the SIL into the proper manual, there is no assurance that future inspections would have been properly conducted.

Restatement of Violation II.A.4

(See II.A.1 above for full restatement of violation)

II.A.4. Maintenance Work Request Nos. 44439 and 67875, which would have implemented corrective actions to the four control room fire damper electrical circuits to ensure that the circuits would function as desired, were not completed.

Summary of Licensee's Response to Violation II.A.4

Although APC admitted that the above violation occurred as described, it protests the issuance of this violation. APC contends that this violation was identified previously as a Severity Level IV violation in the July 30, 1987, NRC inspection Reports Nos. 50-348/87-14 and 50-364/87-14. On August 25, 1987, APC, in a reply to a Notice of Violation, admitted to the violation, offered the reason for the violation, explained the corrective action taken and the results achieved, explained the corrective action taken to avoid a further violation, and reported the full compliance date. Therefore, it is inappropriate, and inconsistent with NRC Enforcement Policy, for the November 3, 1987, Notice of Violation to include this violation in a Severity Level III violation because the NRC already had cited it as a Severity Level IV violation in the July 30, 1987, Notice of Violation. The licensee contends that the imposition of two penalties on the basis of the same set of facts would result in an "undue overlapping of the penalties imposed." In the matter of Atlantic Research Corporation, 7 N.R.C. 701, 708 (1978) (footnote omitted), rev'd on other grounds, 9 N.R.C. 611 (1979).

NRC Evaluation of Licensee's Response to Violation II.A.4

The staff does not accept the proposition that the imposition of two penalties, where different regulatory requirements are based on the same facts, is prohibited. This need not be resolved here because different requirements and facts are at issue.

Violation II.A.4 is not the same as the violation issued on July 30, 1987. The July 30, 1987, violation cited the failure to inspect and/or test the four fire dampers following the completion of work authorized by CWR 1-32.86 and MWR 26982 in 1981. Had these tests been performed, it would have been discovered that wiring had not terminated on the Smoke Release Device (SRDs) for all four dampers.

Violation II.A.4 addresses the fact that in 1982 when APC discovered the failure to terminate the SRDs, two MWRs were written to correct the problem (44439 and 67875), but these work orders were not acted on until June 1987, after the issue was highlighted by the NRC.

The failure to take adequate corrective actions for an identified condition is the issue in violation II.A.4, while in the earlier violation the issue was the failure to perform an adequate test/inspection. Even though in this

case the same plant hardware is involved, two regulatory requirements were not met and therefore two violations are appropriate.

Restatement of Violation II.A.5

(See II.A.1 above for full restatement of violation)

II.A.5 Contrary to the above, the inspectors identified cracks in a number of cells of the safety-related station batteries. Despite the fact that NRC Information Notice (IN) 84-83 identified that such conditions can be caused by the use of hydrocarbon-based solvents for cleaning purposes, the licensee had not updated one of three pertinent electrical maintenance procedures to address the problem.

Summary of Licensee's Response to Violation II.A.5

APC denied this violation and presented the following arguments:

NRC IN 84-83, "Various Battery Problems," which was issued by the NRC Staff on November 19, 1984, discussed overloading D.C. buses and solvent induced battery case cracking. The subject notice detailed three cases in which battery case cracking had occurred. The notice attributed the cracking in two cases to the use of a solvent, trichloroethylene, which was used to clean battery posts while the third case of cracking was attributed to the application of a hydrocarbon based grease to the vinyl straps on the battery racks to aid in installation of the cells. IN 84-83 states, "Licensees may wish to review their maintenance and surveillance procedures for station batteries to ensure that the use of solvents in the vicinity of batteries is carefully monitored and in accordance with procedures approved by the battery manufacturer's service department." The notice did not make any recommendation for cleaners to be used. The electrical maintenance procedures at Farley Nuclear Plant for battery cleaning have always required, in the material section, that bicarbonate soda be used. The use of bicarbonate soda for cleaning of batteries is also included in the training of maintenance personnel.

APC maintained that it did provide adequate procedural guidance for cleaning batteries since only bicarbonate soda was listed in the maintenance procedures. The response to IN 84-83 was adequate since procedures specified the proper cleaning material and only electrical maintenance personnel are authorized to clean batteries. A precautionary note instructing personnel not to use solvents was added to the Units 1 and 2 procedure for cleaning the auxiliary building batteries. Although a precautionary note was not included in the procedure for cleaning the service water batteries, there is no evidence that solvents have ever been used on them. Therefore, there was no inadequacy of corrective action in this case.

Procedural guidance is provided for the purpose of directing the activities to be performed. It is not the intent of procedural guidance to provide precautions against all possible inappropriate actions. The addition of a precaution against use of hydrocarbon based solvents is a procedural enhancement which is not mandatory for adequate corrective action. Therefore, there is no basis for a violation of Appendix B, Criterion XVI.

NRC Evaluation of Licensee Response to Violation II.A.5

This issue was included as an example of violation II.A since it was another instance of a corrective action being initiated but not completed (only two of three procedures were changed). However, the staff agrees that in this instance the corrective action was an enhancement to the procedure rather than a correction and therefore the failure to change the procedure would be more appropriately categorized as an observation of a poor practice in the area of corrective actions rather than an example of a violation. Consequently, the staff agrees that example five of violation II.A should be withdrawn.

Restatement of Violation II.BII. Inadequate Corrective Actions and Inspections

- B. 10 CFR Part 50, Appendix B, Criterion X, Inspection, as implemented by Section 17 of the Final Safety Analysis Report and Joseph M. Farley Operations Quality Assurance Policy Manual, requires that inspection of activities affecting quality be established and executed to verify conformance with the documented instructions, procedures, and drawings for accomplishing the activity.

Contrary to the above, on June 2, 1987, both Train B, 125-V Service Water (SW) battery racks, were found to be improperly installed and mounted creating in an unanalyzed condition concerning seismic qualification. Specifically, the concrete anchor bolt nuts on all Train B battery rack anchors were backed off and used as leveling nuts for the rack, thus providing no preload on the concrete anchors. The battery racks were improperly installed in the SW Train B battery room approximately one year prior to this inspection and remained in this unanalyzed condition until it was identified by the NRC inspector on June 2, 1987.

Summary of Licensee's Response to Violation II.B

APC admitted that anchor bolt installation was not properly performed in accordance with procedures, but also asserted that subsequent testing demonstrated that the installed configuration resulted in no significant safety issues.

Subsequent to the NRC inspection APC selected four cells, including one of the worst cells, and contracted with the battery manufacturer to perform seismic testing using Farley specific response spectra curves. Wyle Report 48857-1 dated July 17, 1987 states that, based on the seismic test of the four cells, the specimens possessed sufficient integrity to withstand, without compromise of structure, the prescribed simulated seismic environment. The testing and inspections described herein demonstrate that no safety issues resulted.

NRC Evaluation of Licensee's Response to Violation II.B

The fact that the battery rack anchors were improperly installed and were in an unanalyzed condition was the basis of this violation. The fact that subsequent testing demonstrated that the installed configuration resulted in no significant safety issues does not change the basis for this violation.

Summary of Licensee's Objection to Aggregation of Violations I.A. and I.B

The licensee contended that violations I.A. and I.B are two separate and distinct findings and should not have been considered in the aggregate as a Severity Level III problem. The first finding concerned activities alleged to be in violation of 10 CFR Part 50, Appendix B, Criterion VII, "Control of all Purchased Material and Equipment." The second finding concerned activities alleged to be in violation of Criterion III of Appendix B, "Design Control." APC asserted that the above findings involve separate and distinct conditions not appropriate for aggregation under the applicable Commission enforcement guidance found in NRC Inspection and Enforcement Manual, Chapter 0400, Section 05.06 (4/24/85).

Additionally, with respect to the first finding, APC denied that a violation of Criterion VII occurred. With respect to the second, APC denied, in part, that a violation of Criterion III occurred.

In arguing that the violations should not have been aggregated, APC claims that the NRC recognized the underlying dissimilarity of these findings when it cited separate and distinct regulatory provisions as having been violated in each case. Thus, separate civil penalties may be appropriate if the severity of each violation so warrants [Enforcement Manual §05.06 *supra*], but aggregation of violations I.A and I.B was not appropriate. Accordingly, APC submitted that these findings should be assessed independently if, in fact, the violations occurred.

NRC Evaluation of Licensee Objection to Aggregation of Violations I.A and I.B

APC has improperly applied NRC enforcement guidance in this case. The guidance provides for aggregation when several violations stem from the same cause or problem area.

Violations I.A and I.B were aggregated due to the fact that both were the result of deficiencies identified in the procurement program in place at the APC. Both violations concerned items originally manufactured as commercial products and either improperly or inadequately evaluated for use in safety-related applications. The staff does not view characterizing the licensee's procurement program as the problem area as being inconsistent with enforcement guidance even though such a characterization may be broader than the licensee thinks is appropriate. Therefore, the aggregation of violations I.A and I.B was appropriate and the Severity Level III violation remains as stated.

Summary of Licensee's Request for Reduction of Severity Level for Violations I.A and I.B

When properly viewed as separate and distinct matters, the licensee contended that violations I.A and I.B should be classified as no greater than Severity Level IV violations. In this regard, APC relies on the NRC Enforcement Policy which states that (1) Severity Level III violations are cause for a significant concern; (2) Severity Level IV violations are less serious but are more than minor concern; i.e., if left uncorrected they could lead to a more serious concern; and (3) Severity Level V violations are of minor safety or environmental concern.

Based on the Enforcement Policy, APC asserted that the intent of the severity classification scheme is to premise enforcement action on the safety significance of the particular finding, even where a violation of a requirement may have occurred. The licensee concludes that evaluations of actions taken by APC, which are described in Attachment 1 of the licensee's response, demonstrate that no condition was identified with actual safety significance. Therefore, no adverse findings were made regarding the actual condition of the components involved and so the severity level of the violations should be reduced.

NRC Evaluation of Licensee Request for Reduction of Severity Level for Violations I.A and I.B

As described in the staff's evaluation of the licensee's response to Violation I.A, the staff still believes the subject circuit breakers were unqualified for use in 600 volt applications. This finding does involve safety significance due to the fact that the circuit breakers could actually be incapable of performing as intended during fault conditions.

Violation I.B is safety significant because the examples cited illustrated a programmatic breakdown in the APC procurement program. It is acknowledged that, for many of the examples of improperly procured parts cited in the violation, subsequent testing verified acceptability for safety-related applications. However, the very fact that further tests were necessary to verify acceptability is indicative of the programmatic shortcomings which were determined by the staff to be a significant concern. Therefore, the request for reduction of severity level for violations I.A and I.B is denied.

Summary of Licensee's Request for Mitigation of the Civil Penalty Proposed for Violations I.A. and I.B

In the NRC's November 3, 1987, letter transmitting the Notice of Violation, the Staff states that the base civil penalty of \$50,000 for this proposed Severity Level III violation was mitigated 50 percent because of "prior good performance." However, it was not fully mitigated "because of the extent of the weakness in management controls in the general area of procurement demonstrated by the number of examples cited." APC maintained that, based on its discussion above, the examples cited by the Staff in support of Violation I have been substantially reduced in both number and severity. Accordingly, APC maintains that the Staff's reason for not fully mitigating the civil penalty is no longer applicable and any remaining civil penalty should be fully mitigated. Additionally, to support further a full mitigation of the civil penalty, APC maintained that its prompt and extensive corrective action taken in response to the proposed violation warrants full and complete mitigation.

NRC Evaluation of Licensee's Request for Mitigation of the Civil Penalty Proposed for Violations I.A and I.B

The violations and corresponding examples cited by the staff have not been substantially reduced in number or severity by the discussion presented by APC. Furthermore, the corrective action taken as a result of the subject violations has not been judged to be unusually prompt or extensive in nature. Therefore, the request for full mitigation of violations I.A and I.B is denied.

Summary of Licensee's Objection to Aggregation of Violations II.A and II.B

The licensee contended that violations II.A and II.B are two separate and distinct findings and should not have been considered in the aggregate as a Severity Level III problem. The first finding concerned activities alleged to be in violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." The second finding concerned activities alleged to be in violation of Criterion X of Appendix B, "Inspection." APC asserted that the above findings involve separate and distinct conditions not appropriate for aggregation under applicable Commission enforcement guidance. The licensee also referenced the NRC Inspection and Enforcement Manual, Chapter 0400, Section 05.06 (4/24/85). Additionally, with respect to the first finding, APC protested violation II.A.4 and denied violations II.A.2 and II.A.5. However, irrespective of the Staff's disposition of APC's denials of violations, APC claims that the findings of violation II.B should not have been aggregated as a single violation. APC's basis for this claim is that in their view the NRC recognized the underlying dissimilarity of these findings when it cited separate and distinct regulatory provisions as having been violated in each case. Thus, separate civil penalties may be appropriate if the Severity of each violation so warrants. [Enforcement Manual §05.06 *supra*], but aggregation of violations II.A and II.B was not appropriate. Accordingly, APC submitted that these findings should be assessed independently if, in fact, the violations occurred.

NRC Evaluation of Licensee's Objection to Aggregation of Violations II.A and II.B

Violations II.A and II.B were aggregated due to the fact that both violations involved instances where conditions adverse to quality were either not identified or were identified but never corrected. The staff views these violations as being indicative of a less than aggressive attitude toward problem identification and correction which is a significant concern. Therefore, the aggregation of violations II.A and II.B remains.

Summary of Licensee's Request for Reduction of Severity Level for Violations II.A and II.B

When properly viewed as separate and distinct matters, the licensee contended that violations II.A and II.B should be classified as no greater than Severity Level IV violations. In so claiming, the licensee referenced the NRC Enforcement Policy which states: (1) Severity Level III violations are cause for a significant concerns; (2) Severity Level IV violations are less serious but are more than minor concern; i.e., if left uncorrected they could lead to a more serious concern; and (3) Severity Level V violations are of minor safety or environmental concern.

The licensee further noted that the Enforcement Policy, (Supplement I), states that a Severity Level III violation can involve, for example "[a] system designed to prevent or mitigate a serious safety event not being able to perform its intended function under certain conditions ..." (Supplement I, §C.2). The Enforcement Policy also provides as one example of a Severity IV violation, "[f]ailure to meet regulatory requirements [following plant procedures] that have more than minor safety ... significance." [Supplement I, D.3]. Further, the Supplement I example of a Severity Level V violation states, "Violations that have minor safety or environmental significance."

As discussed earlier, the licensee contended that the NRC incorrectly aggregated the separate and distinct conditions addressed in violations II.A and II.B, contrary to the NRC Inspection and Enforcement Manual. Further, violations II.A.2, II.A.4, and II.A.5 were shown either not to constitute violations or otherwise to have been incorrectly included in the Notice. Thus, violations II.A.1 and II.A.3 should stand alone as distinct findings.

Standing alone, the licensee stated that those three violations (II.A.2, II.A.4, and II.A.5) should only be categorized as a Severity Level V or a Severity Level IV violation because none of the three items involved a safety issue of the significance contemplated for Severity Level III violations, e.g., important safety systems "not being able to perform its intended function." As discussed in Attachment 1 of the licensee's response, additional evaluations or inspections performed with respect to violation II.A.1 demonstrated the findings involved had little safety significance. Regarding violation II.A.3, the underlying issue involved only the absence of a single item from a manual which was of no safety significance as measures were in place which would have prevented the condition from occurring in the first instance.

In reference to violation II.B, APC determined that as-found configurations of the battery racks did not involve a safety significant issue, notwithstanding the discovered position of the nuts. Thus, the observed condition had only minor, if any, safety or environmental significance. Therefore, in accordance with the Enforcement Policy, at most a Severity Level IV violation should apply to this condition.

NRC Evaluation of Licensee Request for Reduction of Severity Level for Violations II.A and II.B

Violations II.A.1, II.A.4, and II.B concerned actual hardware deficiencies that at a minimum degraded safety-related equipment. These examples, along with those of less individual significance, indicate a programmatic problem in the areas of identification and corrective action of conditions adverse to quality. The staff still considers them to be of significant concern; and therefore, the request for a reduction in severity level for Violations II.A and II.B is denied.

Summary of Licensee's Request for Mitigation of the Civil Penalty Proposed for Violations II.A. and II.B

In the NRC's November 3, 1987, letter transmitting the Notice of Violation, the Staff states that the base civil penalty of \$50,000 for this proposed Severity Level III violation was mitigated 50 percent because of "prior good performance." However, it was not fully mitigated "because of the extent of the weakness in management controls in the general area of procurement demonstrated by the number of examples cited." APC maintained that based on its discussion above, the examples cited by the Staff in support of Violation II have been substantially reduced in both number and severity. Accordingly, APC maintains that the Staff's reason for not fully mitigating the civil penalty is no longer applicable and any remaining civil penalty should be fully mitigated. Additionally, to support further a full mitigation of the civil penalty, APC maintained that its prompt and extensive corrective action taken in response to the proposed violation warrants full and complete mitigation.

NRC Evaluation of Licensee's Request for Mitigation of the Civil Penalty
Proposed for Violations II.A and II.B

As previously stated, the examples cited by the staff have not been substantially reduced in either size or number. Furthermore, the corrective action taken as a result of the subject violations has not been judged to be unusually prompt or extensive in nature. Therefore, the request for full mitigation of violations II.A and II.B is denied.

Conclusion

After careful consideration of APC's response to the Notice of Violation and Proposed Imposition of Civil Penalties, the NRC staff has concluded that three of nine examples of violation I.A, the relay terminal box Q1R43G506-B example of violation I.B.5, and example 5 of Violation II.A should be withdrawn; that the remaining examples of violations I.A, I.B.5, and II.A and the remaining violations in their entirety occurred as stated in the Notice; and that an adequate basis was not provided to warrant either recategorization of the violations, reduction of the severity level, or withdrawal of the proposed civil penalties. Although three of nine examples of violation I.A, one example of violation I.B.5, and one example of Violation II.A have been withdrawn, these examples were not considered to be major contributors to the enforcement action taken. Consequently, the proposed civil penalties in the total amount of \$50,000 should be imposed.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CALIFORNIA 94596

Docket Nos. 50-528 and 50-529
License Nos. NPF-41 and NPF-51
EA 88-62

APR 13 1988

Arizona Nuclear Power Project
ATTN: Mr. E. E. Van Brunt, Jr.
Executive Vice President
Post Office Box 52034
Phoenix, Arizona 85072-2034

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC INSPECTION REPORT NOS. 50-528/88-02, 50-528/88-07,
50-529/88-02, AND 50-529/88-07)

This letter refers to (1) a special inspection conducted on January 27-29, 1988, and (2) the resident inspector inspection conducted on January 17 through March 5, 1988, at the Palo Verde Nuclear Generating Station. Several apparent violations of NRC requirements were identified by these inspections. With the exception of the event involving the High Pressure Safety Injection (HPSI) pump at Unit 1, the apparent violations were discussed with you during the Enforcement Conference/Management Meeting held on February 29, 1988.

The violations of NRC requirements in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties involve: inoperability of the steam driven auxiliary feedwater pumps in both Units 1 and 2 while operability was required by the technical specifications; inadequate technical review of a modification affecting the automatic initiation capability of the auxiliary feedwater pumps; incomplete testing of the auxiliary feedwater system following modification work; quality control instructions lacking appropriate acceptance criteria; inoperability of an auxiliary feedwater pump at Unit 2, due to the pump discharge valve being incorrectly positioned; entry into plant operational mode 4 at Unit 1 without meeting the technical specification requirement for an operable HPSI pump; and the occurrence of an inadvertent safety injection at Unit 2 due to a failure to follow the applicable procedure. Several of these violations were identified by you, as reported in Licensee Event Reports 50-528/87-025, 50-529/88-04, 50-529/88-05, and 50-529/88-04.

The focus of the special inspection was to review the circumstances which led to the extended inoperability of the safety related steam driven auxiliary feedwater pumps at Units 1 and 2 with the units operating at power. Based on this review, we have concluded that the initiating error of this event was the assignment of work to an engineer who was unqualified to perform the electrical engineering evaluation involved in the task, and the failure of the engineer and his supervisors to recognize that the involvement of other engineering disciplines was required to adequately address the work. In addition, the Engineering Evaluation Request (EER) process under which the

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

work was done was an inappropriate mechanism with which to do the technical work involved in that your EER program does not require the detailed reviews normally associated with engineering work being done to modify safety related systems. In our most recent SALP evaluation of Palo Verde, we were concerned with a number of examples of weak or untimely engineering work, and with your failure to develop and manage your System Engineer program to the extent we expected. The pump inoperability problem has heightened our concerns.

With regard to the modification to the auxiliary feedwater systems, even though your programs require many of your work groups to perform reviews, checks, and tests of the work performed, none uncovered the error which led to the inoperability of the pumps. Although the undetected loss of operability of the steam driven auxiliary feedwater pumps is unacceptable, our major concerns with the event are the poor management and execution of the technical work and that the personnel who fulfilled the checking and testing requirements failed to identify the engineering error which caused the event.

In view of our discussions of the past several years on the importance of performing quality technical work, and of the assurances we have received from top level ANPP managers that the quality of technical work was being given priority attention, we find the performance of your system engineering group and others associated with this matter to be particularly disappointing. Our concern is increased by our impression that several of your employees who were involved in the event apparently did not clearly understand the importance of their responsibilities to thoroughly check the work.

The three violations set forth in section II of the enclosed Notice (Violations IIA thru C) involve less than expected operator performance. These violations are similar to the violations in section I (IA thru D) in that your programs created opportunities for your staff to prevent the violations, but in each case those opportunities were missed. Individually the safety significance of each of these three violations was fortuitously low. However, when viewed collectively, the violations are indicative of a significant problem resulting in poor operator performance, and are consistent with our recent observations of a divergence between your management expectations and the performance of your operations staff. Further, as indicated by Violation II.C, we are concerned that your operations personnel do not fully understand the meaning and importance of initialing or signing procedural steps.

During both our review and your own review of these events, a number of obvious deficiencies were identified. It is our perception that although these deficiencies have existed for some time, you had not previously recognized them. Additionally, during my tour of Palo Verde in January, 1988, it was clear to me that a number of problems existed with regard to plant operation, and I expressed those concerns at that time to senior ANPP management.

We conclude that your senior management staff is not taking appropriate action to ensure prompt attention when indicators point to a trend of personnel deviating from fundamental principles. We believe that the weakness is due, in part, to failure of your managers to personally devote significant time to direct observation of plant activities, and failure of your Quality Assurance and plant oversight committees to identify and address early signs of

developing problem areas. We encourage you to increase management attention in the area of personnel performance to ensure a clear understanding by your personnel of the fundamental principles involved with the operation of a nuclear power plant, such as the importance of checking work and the need for attention to detail by all personnel, and in particular, by operations personnel.

To ensure your awareness of our insistence on the proper performance of engineering activities and careful checks of technical work, a civil penalty for the violations contained in section I of the Notice of Violation is proposed. To emphasize the importance of minimizing operator errors, and to highlight our expectation that ANPP management must quickly identify and address problems, a separate civil penalty is proposed for the violations contained in section II of the Notice of Violation. In summary, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of One Hundred Thousand Dollars (\$100,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violations described in the enclosed Notice have been categorized as two Severity Level III problems.

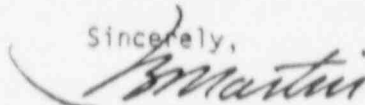
The base value of the civil penalty for a Severity Level III violation is \$50,000. The escalation and mitigation factors in the Enforcement Policy were considered and it is our conclusion that neither mitigation nor escalation is warranted in either case.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



John B. Martin
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalties

cc w/enclosure:

J. G. Haynes, Vice President, Nuclear Production, ANPP
W. F. Quinn, Director, Nuclear Safety and Licensing, ANPP
L. G. Papworth, Director, Quality Assurance, ANPP
T. D. Shriver, Compliance Manager, ANPP
J. Morrison, PVIF
L. Bernabei, GAP T. Hogan, ACC
A. C. Gehr, Snell & Wilmer

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Arizona Public Service Company
Palo Verde Nuclear Generating Station

Docket Nos. 50-528 and 50-529
License Nos. NPF-41 and NPF-51
EA 88-62

During NRC inspections conducted on January 27-29, 1988, and January 17 thru March 5, 1988, 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 two civil penalties 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:

I.A. Technical Specification 3.7.1.2, applicable to both Units 1 and 2, requires that at least three independent steam generator auxiliary feedwater pumps shall be operable in modes 1, 2 and 3; in mode 4 the pumps shall be operable until the steam generators are no longer required for heat removal. The action statement of technical specification 3.7.1.2 further requires that with one auxiliary feedwater pump inoperable, the inoperable pump shall be restored to an operable status within 72 hours or the unit shall be placed in hot standby within the next 6 hours and in hot shutdown within the following 6 hours.

Contrary to the above, both Units 1 and 2 operated with only two operable independent steam generator auxiliary feedwater pumps without meeting the technical specification action requirements in that:

1. With the turbine driven auxiliary feedwater pump inoperable, Unit 1 operated in modes 1, 2, 3, and 4 from September 23, 1987 until October 5, 1987.
2. With the turbine driven auxiliary feedwater pump inoperable, Unit 2 operated in mode 1 from October 14, 1987 until November 29, 1987.

B. Technical Specification 6.5.2.3 requires in part that proposed modifications to the unit's nuclear safety-related systems and components be reviewed by an individual/group other than the individual/group which designed the modification, and that the modification be approved by the Plant Manager or by the Manager Technical Support prior to implementation.

Contrary to the above, during September, October and November, 1987, the turbine driven auxiliary feedwater pump steam supply isolation valves (SGAUV0134 and SGAUV0138) at both Units 1 and 2 were modified without the modification being reviewed by an individual/group other than the individual/group which designed the modification, and without prior approval by the Plant Manager or the Manager Technical Support.

- C. 10 CFR Part 50, Appendix B, Criterion XI, Test Control, as implemented by the licensee's Quality Assurance Manual, Criterion 11 and the Palo Verde Final Safety Analysis Report, Section 17.2.11, requires in part that the licensee's test program assure that required testing be identified and performed to demonstrate that systems will perform satisfactorily in service following modifications.

Contrary to the above, testing in September, October and November 1987, of the auxiliary feedwater systems for both Units 1 and 2, following modifications made to the turbine driven pump steam supply isolation valves (SGAUV0134 and SGAUV0138), did not include an integrated test of the pumps and their associated steam supply isolation valves.

- D. 10 CFR Part 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings, requires in part that instructions and procedures shall include appropriate quantitative acceptance criteria to assure the satisfactory accomplishment of important activities.

Contrary to the above, the instructions contained in the work orders for adjusting the limit switches in the turbine driven auxiliary feedwater pump steam supply isolation valves (SGAUV0134 and SGAUV0138) during September, October, and November, 1987, on both Units 1 and 2, did not contain appropriate quantitative acceptance criteria for verifying the settings of the limit switches.

Collectively, Violations IA thru D have been classified as a Severity Level III problem. (Supplement I)

Cumulative Civil Penalty - \$50,000 - assessed equally among the violations.

- II.A. Technical Specification 3.5.3 provides that when the unit is in mode 4, there shall be operable a minimum of one Emergency Core Cooling System (ECCS) subsystem comprised of a High Pressure Safety Injection (HPSI) pump and flow path. Technical Specification 3.0.4 requires that the conditions of Limiting Conditions of Operation be met without reliance on the provisions contained in the action requirements when entering into an operational mode.

Contrary to the above, on February 29, 1988, Unit 1 entered mode 4 and operated for approximately one hour and twenty-five minutes without an operable HPSI pump.

- B. Technical Specification 3.7.1.2, requires that at least three independent steam generator auxiliary feedwater pumps shall be operable in modes 1, 2 and 3; in mode 4 the pumps shall be operable until the steam generators are no longer required for heat removal. The action statement of technical specification 3.7.1.2 further requires that with one auxiliary feedwater pump inoperable, the inoperable pump shall be restored to an operable status within 72 hours or the unit shall be placed in hot standby within the next 6 hours and in hot shutdown within the following 6 hours.

Contrary to the above, Unit 2 operated in modes 1, 2 and 3 from February 8 to February 20, 1988, with less than three independent steam generator auxiliary feedwater pumps operable due to the discharge valve on pump AFN-P01 being closed.

- C. Technical Specification 6.8.1 states, in part, that the licensee shall establish, maintain and implement written procedures covering activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2 (February 1973).

Regulatory Guide 1.33, Revision 2, Appendix A, Section 2j, refers to a procedure for changing plant modes from Hot Standby to Cold Shutdown. Procedure 420P-2ZZ10, Revision 2, "Hot Standby to Cold Shutdown Mode 3 to Mode 5", step 4.3.114.2, requires that the licensee bypass all four channels of pressurizer low pressure protection when the reactor coolant system temperature drops below 200 degrees F and that the step be initialed when completed.

10 CFR 50.9(a) requires, in part, that information required to be maintained by licensees be complete and accurate in all respects.

Contrary to the above, on February 21, 1988, with the Unit 2 reactor coolant system temperature below 200 degrees F, only one of the four channels of pressurizer low pressure protection was bypassed, and step 4.3.114.2 was initialed as having been completed.

Collectively, Violations IIA thru C have been classified as a Severity Level III problem. (Supplement I)

Cumulative Civil Penalty - \$50,000 - assessed equally among the violations.

Pursuant to the provisions of 10 CFR 2.201, the Arizona Public Service Company (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 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.

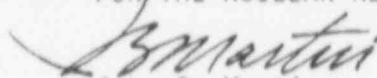
Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalties by letter to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of the civil penalties proposed above 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation 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 penalties should not be imposed. In addition to protesting the civil penalties, such answer may request remission or mitigation of the penalties.

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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region V, 1450 Maria Lane, Suite 210, Walnut Creek, California, and a copy to Timothy Pulich, Senior Resident Inspector, at the Palo Verde Nuclear Generating Station.

FOR THE NUCLEAR REGULATORY COMMISSION



John B. Martin
Regional Administrator

Dated at Walnut Creek, California this
13 day of April 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

MAR 14 1988

Docket Nos. 50-313/87-29 and 50-368/87-29
License Nos. DPR-51 and NPF-6
EA 87-227

Arkansas Power & Light Company
ATTN: Gene Campbell, Vice President
Nuclear Operations
Post Office Box 551
Little Rock, Arkansas 72203

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT NOS. 50-313/87-29, AND 50-368/87-29)

This refers to the inspection conducted by an NRC inspection team on August 18-20, 1987 at the Arkansas Nuclear One, Units 1 and 2. During this inspection, NRC personnel identified findings that were discussed at an enforcement conference on December 18, 1987, at the NRC Region IV office in Arlington, Texas.

After evaluating the information you presented, one violation was identified which involved the failure to correct a longstanding condition adverse to quality. From the time of startup testing in 1974 until August 1987, when it was identified by the NRC inspectors, temperatures in certain regions of the Unit 1 containment building were considerably higher than the design temperature specified in the Updated Safety Analysis Report (USAR). This condition was recognized by plant personnel during the startup program yet, neither adequate corrective action or evaluation of the problem was accomplished. Of additional concern to the NRC are other problems highlighted by this violation including, the failure to properly report the condition when it was identified and the impact on your environment qualification program including operation of the plant with acoustic monitor preamplifiers in place twenty-one months beyond their qualified life. In total, these problems collectively point towards weaknesses in your design control process which continue to generate potential safety significant problems that have not been identified, analyzed, or properly reported. When the high temperature problem was identified you did perform substantial analyses that were reported in your Justification for Continued Operation (JCO) dated August 28, 1987. You also made a number of short and long term commitments for inspection and improvements to mitigate the temperature problem. The JCO and your commitments were found to be acceptable by the staff and our evaluation was documented in a letter dated October 15, 1987. Based on the inspection findings and on the information presented by your staff during the enforcement conference, the NRC feels that there is a need to further develop or sharpen the safety consciousness throughout your organization such that a recurrence of these problems will be avoided.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

To emphasize this need, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of One Hundred Thousand Dollars (\$100,000) for the violation described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violation described in the enclosed Notice has been categorized at a Severity Level III. The base civil penalty amount has been increased by 100 percent because this violation continued uncorrected for such an extended period of time, notwithstanding your response to the matter following NRC identification of it in August 1987.

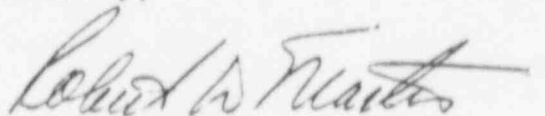
As indicated earlier we are also concerned with the failure to report to the Commission the elevated containment temperatures which were outside the plant design basis as described in the USAR. We understand that your decision for not reporting this condition was based on your conclusion that even though the condition was outside the design basis, the plant was not degraded. In the future, we expect that all conditions outside the design basis will be reported. As stated in the Statements of Consideration for 10 CFR 50.72, if there is doubt about whether or not to report, a report should be made.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. Your response should also address what actions you plan to take to assure matters such as those at issue here are promptly reported. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



Robert D. Martin
Regional Administrator

Enclosure:
Notice of Violation and
Proposed Imposition
of Civil Penalty

cc: Arkansas Radiation Control Program Director

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Arkansas Power and Light Company
Arkansas Nuclear One
Little Rock, Arkansas

Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6
EA 87-227

During NRC an inspection conducted during the period August 18-20, 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 violation and associated civil penalty are set forth below:

10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, requires, in part, that conditions adverse to quality be promptly identified and corrected.

Arkansas Power and Light Company Quality Assurance Manual Operations Section 16 implements the requirements of 10 CFR Part 50, Appendix B, Criterion XVI.

Contrary to the above, a condition adverse to quality was not promptly or properly corrected. Since 1974 the licensee has known that temperatures in some regions of the Unit 1 containment building, during operations, were considerably higher than the design temperature specified in the Updated Final Safety Analysis Report. This condition existed until August 1987 without proper corrective action being taken in that, the failure to properly evaluate the effects of high containment temperatures on structures, components, and accident analyses resulting from failure by the licensee to identify and control design interfaces and to adequately coordinate participating design organizations to assure that the design basis was correctly translated and that deviations were controlled as required by 10 CFR 50, Appendix B, Criterion III were not identified and corrected.

This is a Severity Level III violation (Supplement I)

Civil Penalty - \$100,000.

Pursuant to the provisions of 10 CFR 2.201, Arkansas Power and Light Company (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 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.

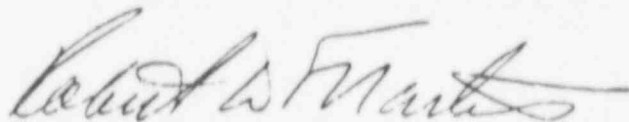
Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, or money order payable to the Treasurer of the United States in the amount of the civil penalty proposed above, 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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 penalty, 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 penalty, 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 at the facility which is the subject of this Notice.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert D. Martin
Regional Administrator

Dated at Arlington, Texas,
this 14th day of March 1988.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
749 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 6012

JAN 4 1988

Cocket Nos. 50-295; 50-304
Licenses No. DPR-39; DPR-48
EA 87-211

Commonwealth Edison Company
ATTN: Mr. James J. O'Connor
President
Post Office Box 767
Chicago, IL 60690

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
NRC INSPECTION REPORTS NO. 50-295/87032(DRP); 50-304/87033(DRP)

This refers to the NRC inspection conducted during the period September 21 through October 26, 1987, at the Zion Generating Station, Units 1 and 2, of activities authorized by NRC Operating Licenses No. DPR-39 and No. DPR-48 relating to the testing of pressure isolation check valves (PIVs). This inspection identified inadequacies in the Commonwealth Edison Company (CECo) Quality Assurance (QA) Program and management controls to ensure adequate testing of Zion Station's PIVs. The details were presented in the inspection report sent to you by letter dated October 29, 1987. On October 30, 1987, an on-site management conference was held with members of your staff in the Region III office to discuss the violations, the root causes, and CECo's corrective actions.

The NRC has issued several documents related to measures to assure the pressure isolation capability of certain PIVs ("Event V" check valves). In a 10 CFR 50.54(f) letter to CECo dated February 23, 1980 and a Generic Letter 87-06 dated March 13, 1987, the NRC requested information related to, among other items, whether "Event V" configuration check valves existed in the facility and whether surveillance or periodic tests were done on such valves with specific emphasis on individual valve surveillance or testing, and testing each time the check valve is moved from the fully closed position. The letters also requested a description of the periodic tests or measures to assure valve integrity, leakage acceptance criteria, if any, and the testing frequency. The licensee was required to do check valve testing pursuant to the Confirmatory Order issued by the NRC to CECo on February 29, 1980.

The violations in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) are considered significant because they identify weaknesses in the leakage testing procedures for "Event V" check valves, in the implementation of these procedures, and in the review of these procedures. These weaknesses resulted in several Unit 2 valves not having valid leakage test results and in the lack of assurance that these valves would perform their isolation function. These testing weaknesses included: (1) testing, in some instances, as many as 16 check valves at one time, many in series, rather than individually; (2) testing configurations which lacked pressure differential across the valves being tested; (3) procedures specifying inaccurate visual means of measuring flow or specifying incorrect instrument lineups; (4) procedures

specifying observation of a downstream pressure higher than that which was applied upstream or personnel failing to obtain the proper test pressure; (5) failing to have appropriate precautions to assure that proper pretest conditions were established before the start of a new test procedure section; and (6) failing to perform valid periodic testing during a refueling outage which lasted from March through August 1987 .

The NRC has concluded that the violations resulted from multiple examples of engineering deficiencies, invalid test methodology and inappropriate acceptance criteria. In addition, there was an overall failure to apply the CECO approved Quality Assurance Program and other management controls as they relate to the Zion Station's PIV test program. We have concluded that the PIV testing program would not have been able to detect individual PIV degradation or failure. We are particularly concerned that CECO continued to maintain, until shortly before the October 30, 1987 enforcement conference, that its PIV testing program was adequate to test the pressure isolation function of the PIVs and that it did meet regulatory requirements. Such a position was without merit and inconsistent with acceptable testing and engineering practices.

To emphasize the importance of proper control of testing activities and the need to effectively implement testing programs that will provide early identification of equipment or component deficiencies, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of One Hundred Thousand Dollars (\$100,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violations described in the enclosed Notice have been categorized in the aggregate as a Severity Level III problem. The base value of a civil penalty for a Severity Level III violation or problem is \$50,000. The escalation and mitigation factors in the Enforcement Policy were considered and the base civil penalty amount has been increased by 100% percent because: (1) the notice of the potential PIV problems and of the importance of an effective valve testing program provided by the February 23, 1980 50.54(f) letter and Generic Letter 87-06 issued on March 13, 1987; (2) the numerous instances of deficiencies in the licensee's testing procedures and in the implementation of these procedures during the period from 1980 - 1987; and (3) the extended duration for which these violations existed, approximately seven years.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

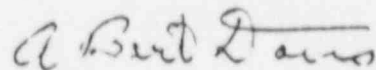
The NRC staff is currently reviewing the circumstances surrounding the CECO submittals to the NRC regarding the repair of leaking PIVs. You will be notified of any action after our review of this matter has been completed. No response regarding this matter is required at this time.

JAN 4 1980

In accordance with Section 2.790 of the NPC's Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,



A. Bert Davis
Regional Administrator

Enclosures:

1. Notice of Violation
and Proposed Imposition
of Civil Penalty
2. Inspection Reports
No. 50-295/87032(DRP);
No. 50-304/87033(DRP)

cc w/enclosures:

Cordell Reed, Senior
Vice President
T. J. Maiman, Vice President
PWR Operations
D. Butterfield, Nuclear
Licensing Manager
G. J. Pliml, Station Manager
Jan Norris, Project Manager,
NRR
DCD/DCB (RIDS)
Licensing Fee Management
Branch
Resident Inspector, RIII
Richard Hubbard
J. W. McCaffrey, Chief,
Public Utilities
Division
Mayor, City of Zion

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Commonwealth Edison Company
Zion Generating Station
Units 1 and 2

Docket Nos. 50-295; 50-304
Licenses No. DPR-39; DPR-48
EA 87-211

As a result of an NRC inspection conducted during the period September 21 through October 26, 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 penalty are set forth below:

- A. 10 CFR Part 50, Appendix B, Criterion V, as implemented by Commonwealth Edison Company's Quality Assurance Topical Report, CE-1-A, requires, in part, that activities affecting quality be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and which include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Contrary to the above, as of October 26, 1987, activities affecting quality were not, in all cases, prescribed by instructions or procedures which were appropriate to the circumstances and which included appropriate quantitative or qualitative acceptance criteria.

1. Zion Procedure PT-2P, Safety Injection System Backup Check Valve Leak Check - RHR Cold Leg Injection Line, failed to provide for adequate leak testing of valves in that:
 - (a) Valves 2SI-9012 A through D, valves 2SI-9004 C and D, and valves 2SI-8905 A and B were specified to be leak tested in test configurations in which there was no pressure differential across the valve being tested.
 - (b) Valves were specified to be tested in series. This practice does not allow for quantifying individual valve leakage.
2. Zion Procedure PT-2M, RHR/SI Cold Leg, SI Hot Leg Injection Check Valve Leak Test, failed to provide for adequate leak testing of certain valves in that:
 - (a) Valve leakage was specified to be measured either using inaccurate visual means or using an instrument in a configuration which would render the instrument incapable of measuring flow.
 - (b) Test pressure in the leak path was specified to be throttled to 1750 psig prior to measuring the valve leak rate; however, the applied test pressure directed by the procedure (600 psig) would not allow the specified 1750 psig to be reached.

- (c) Procedure PT-2M did not provide for the valving in of the pressure gauge used to determine whether the check valves were leaking, thereby potentially invalidating any readings taken from this gauge.
- (d) Procedure PT-2M did not provide for relieving the test system pressure before continuing the testing of other valves, thereby invalidating the results of subsequent testing.
- (e) Valves were specified to be tested in parallel, which does not provide for quantifying individual valve leakage.

- B. 10 CFR Part 50, Appendix B, Criterion XI, as implemented by Commonwealth Edison Company's Quality Assurance Topical Report, CE-1-A, requires, in part, that a test program be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures.

Contrary to the above, as of October 26, 1987, the licensee's test program failed to assure that all testing required to demonstrate that pressure isolation check valves will perform satisfactorily in service was performed in accordance with written test procedures. The procedure did not provide adequate direction as to when the procedures were required to be performed. Specifically, during the refueling outage from March 1987 through August 1987 and after the safety injection which occurred on July 29, 1987, check valve leakage testing was not specified nor done to assure that the LPI/RHR check valves were installed correctly and functioning as pressure isolation barriers prior to plant startup.

- C. 10 CFR Part 50, Appendix B, Criterion II, as implemented by the Commonwealth Edison Company Quality Assurance Topical Report CE-1-A, requires, in part, that the licensee comply with NRC Safety Guide 33, dated November 1972. Safety Guide 33 states that the requirements and recommendations in proposed standard ANS-3.2, "Standard for Administrative Controls for Nuclear Power Plants," dated November 2, 1972 (revised as ANSI N18.7), provide an adequate basis for complying with the quality assurance program requirements of Appendix B to 10 CFR Part 50. ANSI-3.2, Section 5.4, requires that each procedure be reviewed periodically to ensure that the procedures in current use provide the best possible instructions to the operators.

Contrary to the above, periodic reviews of test procedures PT-2P, PT-2M, and PT-2N, PWR Hot Leg and Cold Leg Injection Check Valve Leak Check, were not performed from November 1980 through August 1987 to ensure that the best possible instructions were provided to the operators.

- D. Technical Specification 6.2.1.G requires that written procedures, including applicable checkoff lists covering surveillance and testing requirements, be implemented by the licensee in its operation of the facility.

A prerequisite of surveillance test procedure PT-2P is that the test be conducted when the RCS pressure is greater than 1800 psig.

Contrary to the above, on July 29, 1987, a surveillance test prerequisite for procedure PT-2P was not implemented in that the licensee performed the surveillance test when the RCS pressure was only 900 psig.

Collectively, these violations have been categorized as a Severity Level III problem (Supplement I).

Cumulative Civil Penalty - \$100,000 (assessed equally among the violations).

Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison Company (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 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 penalty by letter 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 amount of civil penalty proposed above, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation 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, such answer may request remission or mitigation of the penalty.

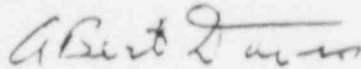
In requesting mitigation of the proposed penalty, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1987), should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, 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.

JAN 4 1988

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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, 799 Roosevelt Road, Glen Ellyn, Illinois, 60137, and a copy to the NRC Resident Inspector at Zion.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Bert Davis
Regional Administrator

Dated at Glen Ellyn, Illinois
this 4th day of January 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 26 1988

Docket Nos. 50-295 and 50-304
Licenses No. DPR-39 and DPR-48
EA 87-211

Commonwealth Edison Company
ATTN: Mr. James J. O'Connor
President
Post Office Box 767
Chicago, Illinois 60690

Gentlemen:

SUBJECT: ORDER IMPOSING A CIVIL MONETARY PENALTY

This refers to your letter dated February 3, 1988, in response to the Notice of Violation and Proposed Imposition of Civil Penalty (Notice) sent to you by our letter dated January 4, 1988. Our letter and Notice described four violations which were identified during an inspection conducted from September 21 through October 26, 1987, at the Zion Nuclear Power Station, Units 1 and 2.

To emphasize the need for you to ensure proper control of testing activities and the need to effectively implement testing programs that will provide early identification of equipment or component deficiencies, a civil penalty of One Hundred Thousand Dollars (\$100,000) was proposed.

In your response dated February 3, 1988, you (1) disagreed with our assertion that your pressure isolation valve (PIV) testing program was inadequate to test the pressure isolation function of the PIVs, (2) denied that Violation B occurred as stated in the Notice, (3) took partial exception to Violation C, and (4) requested mitigation of the civil penalty.

The PIV testing program was intended to provide assurance that an Event V loss of coolant accident would not occur. The NRC issued an Order in 1980 requiring a PIV testing program at Zion be implemented. Your testing program, as a result of that Order, was not as described in your letters to the NRC and, as implemented, was inadequate to verify the pressure isolation function of the valves. After careful consideration of your response, we have concluded for the reasons given in the Appendix attached to the enclosed Order Imposing Civil Monetary Penalty that Violations B and C occurred as stated in the Notice and that a sufficient basis was not provided for mitigation of the proposed civil penalty. Accordingly, we hereby serve the enclosed Order on Commonwealth Edison Company imposing a civil monetary penalty in the amount of One Hundred Thousand Dollars (\$100,000). We will review the effectiveness of your corrective actions during a subsequent inspection.

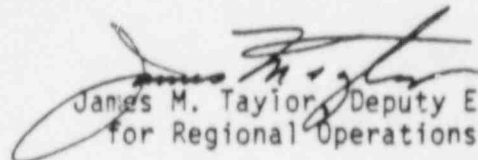
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Commonwealth Edison Company

- 2 -

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

Sincerely,


James M. Taylor, Deputy Executive Director
for Regional Operations

Enclosure: Order Imposing
Civil Monetary Penalty
with Appendix

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of
Commonwealth Edison Company
Zion Generating Station, Units 1 and 2

Docket Nos. 50-295 and 50-304
Licenses No. DPR-39 and DPR-48
EA 87-211

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Commonwealth Edison Company (licensee) is the holder of Operating Licenses No. DPR-39 and DPR-48 (licenses) issued by the Nuclear Regulatory Commission (NRC/Commission) on April 6 and November 4, 1973. The licenses authorize the licensee to operate Zion Generating Station in accordance with the conditions specified therein.

II

A special inspection of the licensee's activities was conducted on September 21 through October 26, 1987. The results of this inspection indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was served upon the licensee by letter dated January 4, 1988. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalty proposed for the violations. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalty by letter dated February 3, 1988. In its response, the licensee admits certain violations, disagreed that its pressure isolation valve testing program was inadequate, denied that Violation B occurred as stated in the Notice, took partial exception to Violation C, and requested mitigation of the civil penalty.

III

After consideration of the licensee's response and the statements of fact, explanation, and argument for mitigation contained therein, the Deputy Executive Director for Regional Operations has determined, as set forth in the Appendix to this Order, that the violations occurred as stated and that the penalty proposed for the violations in the Notice of Violation ar. Proposed Imposition of Civil Penalty should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of One Hundred Thousand Dollars (\$100,000) within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing should be clearly marked as a "Request for an Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control

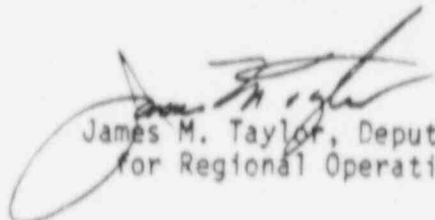
Desk, Washington, D.C. 20555, with a copy to the Assistant General Counsel for Enforcement, Office of General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; to the Regional Administrator, U.S. Nuclear Regulatory Commission, 799 Roosevelt Road, Glen Ellyn, Illinois 60137; and to the NRC Resident Inspector at Zion.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

- (a) whether the licensee was in violation of the Commission's requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty referenced in Section II above and
- (b) whether, on the basis of such violation, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Rockville, Maryland
this 26th day of May 1988.

APPENDIX
EVALUATION AND CONCLUSION

In a letter dated February 3, 1988, the licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalties (Notice) dated January 4, 1988. In its response the licensee (1) admitted to two of the four violations documented in the Notice, (2) denied that Violation B had occurred, (3) admitted to Violation C in part, subject to qualifications, (4) asserted that it had aggressively pursued correction of pressure isolation valve testing deficiencies, and (5) requested mitigation of the civil penalty based on its prompt corrective actions, its prior performance indicating responsiveness for regulatory concerns, and its denial that one of the violations had occurred. Provided below are (1) a restatement of contested Violation B, a summary of the licensee's response to Violation B, and the NRC's evaluation of the contested violation; (2) a restatement of Violation C (which the licensee has admitted in part), a summary of the qualifications associated with the licensee's admission of Violation C, and the NRC's evaluation of the licensee's qualifications; (3) the NRC's assessment of the licensee's corrective actions concerning its Pressure Isolation Valve (PIV) testing program; (4) the NRC's evaluation of the licensee's arguments in support of mitigation of the proposed civil penalty; and (5) the NRC's conclusion.

I. Evaluation of Violation B

A. Restatement of Violation B

10 CFR Part 50, Appendix B, Criterion XI, as implemented by Commonwealth Edison Company's Quality Assurance Topical Report, CE-1-A, requires, in part, that a test program be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures.

Contrary to the above, as of October 26, 1987, the licensee's test program failed to assure that all testing, required to demonstrate that pressure isolation check valves will perform satisfactorily in service, was performed in accordance with written test procedures. The procedure did not provide adequate direction as to when procedures were required to be performed. Specifically, during the refueling outage from March 1987 through August 1987, and after the safety injection which occurred on July 29, 1987, check valve leakage testing was not specified nor done to assure that the LPI/RHR check valves were installed correctly and functioning as pressure isolation barriers prior to plant startup.

B. Summary of Licensee's Response

In its February 3, 1988, response, the licensee contends that procedures in place as of July 29, 1987, provided adequate direction as to when the PIV tests were to be performed. The licensee asserts that testing of the PIV's after the safety injection on July 29, 1987 was not required because: (1) testing after a single valve actuation does not measurably decrease the already low level of risk from check valve failures as determined by testing every refueling outage,

(2) the NRC has accepted Zion's testing program without requiring a test after each valve actuation, and (3) the testing programs in place at the majority of PWRs do not require testing more frequently than every refueling outage.

C. NRC Evaluation

1. The licensee asserts that testing check valves following valve actuation (such as after the July 29, 1987 safety injection) does not affect check valve failure probability. That assertion is not relevant to this violation. This violation resulted from the licensee's failure to establish an adequate program to assure that testing required to demonstrate that components would perform satisfactorily in service was carried out.
2. The licensee asserts that the NRC has accepted Zion's testing program without requiring a test after each valve actuation. The licensee states that in a January 25, 1980 meeting, the NRC staff described how annual testing of check valves could reduce risk from check valve failures to an acceptable level. The licensee states that, in the formulation of the February 29, 1980 Confirmatory Order, and in Inspection Report Nos. 50-295/80-14 and 50-304/80-14, the NRC established the position that Zion's testing program was acceptable without the requirement to test after every valve actuation. It also cites the NRC endorsement of the Zion Probabilistic Safety Study (ZPSS) and NUREG-1150 results as further indication of NRC acceptance absent commitments to perform testing following each valve actuation.

The NRC's Confirmatory Order issued on February 29, 1980 and the licensee's letters to the NRC dated March 14 and 28, 1980 described criteria for PIV testing. The Order specified the testing to be performed and the letters stated that procedures had been revised incorporating the requirement that these check valves will be tested whenever the primary coolant system pressure is brought to within 100 psig of the system design pressure on the low pressure side of these check valves. After the July 29, 1987 safety injection, check valve testing was not done to assure that the LPI/RHR check valves were installed correctly and functioning as pressure isolation barriers prior to plant startup, even though the primary coolant system pressure was brought to within 100 psig of the system design pressure on the low pressure side of these check valves.

Neither the NRC Confirmatory Order issued February 29, 1980, nor Inspection Report Nos. 50-295/80-14 and 50-304/80-14, nor the NRC endorsement of the ZPSS and NUREG-1150 involved a detailed review of, or acceptance of, the PIV testing program and procedures being implemented by the licensee.

3. The determination of how and when to test PIVs is based on written commitments made by the licensee as well as on Orders and Technical Specifications. The Confirmatory Order of

February 29, 1980 which contained specific requirements for testing PIVs was imposed on Zion Station because, unlike the majority of PWRs, Zion is located in a high population density area. Regulatory requirements for each facility are unique and requirements imposed on other licensees are not relevant to this case.

D. NRC Conclusion

The NRC concludes that the PIVs had not been tested at the frequency required by the February 29, 1980 Confirmatory Order nor as described in letters to the NRC. Therefore, the NRC concludes that the violation did occur as stated in the Notice.

II. Discussion of Violation C

A. Restatement of Violation C

10 CFR Part 50, Appendix a, Criterion II, as implemented by Commonwealth Edison Company Quality Assurance Topical Report, CE-1-A, requires, in part, that the licensee comply with NRC Safety Guide 33, dated November 1972. Safety Guide 33 states that the requirements and recommendations in proposed standard ANS-3.2, "Standard for Administrative Controls for Nuclear Power Plants," dated November 2, 1972 (issued as ANSI N18.7), provide an adequate basis for complying with the quality assurance program requirements of Appendix B to 10 CFR Part 50. ANSI-3.2, Section 5.4, requires that each procedure be reviewed periodically to ensure that the procedures in current use provide the best possible instructions to the operators.

Contrary to the above, periodic reviews of test procedures PT-2P, PT-2M, and PT-2N, RHR Hot Leg and Cold Leg Injection Check Valve Leak Check, were not performed from November 1980 through August 1987 to ensure that the best possible instructions were provided to the operators.

B. Summary of Licensee Response

The licensee admits the violation in part, with the following qualifications: (1) the licensee did perform periodic reviews of the subject procedures, and (2) the periodic procedure review is outlined in Zion Administrative Procedure ZAP 5-51-3, under which guidelines the periodic procedure reviews were performed. The licensee interpreted the violation to address the adequacy of the periodic review.

C. NRC Evaluation

In August 1979, ZAP 5-51-3, "Periodic Procedure Review," established the licensee's periodic procedure review program. As implemented at Zion, procedures were considered to be reviewed when the procedures were performed and the results were evaluated. However, the NRC concludes this does not constitute a periodic review of the procedure, as required by ANSI-3.2, Section 5.4. In addition, guidance was not provided in the procedures to ensure that, as the procedures were

being used, that an evaluation of adequacy of the procedures was conducted. Several procedural deficiencies had not been identified by the licensee's review process.

D. NRC Conclusion

Based on the above, the NRC concludes that the violation did occur as stated in the Notice.

III. Assessment of Corrective Actions for Pressure Isolation Valve Test Program Deficiencies

A. Summary of Licensee's Response

The NRC letter dated January 4, 1988, from A. B. Davis to J. J. O'Connor, transmitting the Notice of Violation and Proposed Imposition of Civil Penalty, stated:

"We are particularly concerned that CECO continued to maintain, until shortly before the October 30, 1987 Enforcement Conference that its PIV testing program was adequate to test the pressure isolation function of the PIV's and that it did meet regulatory requirements."

The licensee response to this issue asserts that once CECO had become aware of specific test procedure deficiencies that had effectively prevented it from satisfying test requirements and commitments, it immediately began an aggressive program of rectifying the deficiencies and retesting the check valves.

B. NRC Evaluation

While the NRC agrees that corrective actions began as early as September 24, 1987, execution of these actions was not performed in accordance with the licensee's quality assurance program and required significant NRC involvement to ensure that PIV testing was performed correctly. The following are examples:

- After the NRC inspectors informed licensee management of specific PIV testing concerns on September 23, 1987, radiographic testing (RT) of some PIVs was conducted on September 24, 1987. However, review of the radiographs was not performed by Quality Control (QC) until October 5, 1987, after NRC inquired about documentation of the RT, review of the results, and acceptance criteria used to evaluate the results. As of March 18, 1988, the licensee had not provided to the NRC the acceptance criteria used for that QC review. The licensee later had these valves leak tested because of ambiguities associated with the use of radiography as a PIV test method.
- On about October 2, 1987, the NRC asked whether calibrated test instrumentation was used for leak testing valves. On October 6, 1987, the inspectors learned that a flowmeter had been used in the past which was not in the licensee calibration program and had not been calibrated following repairs in 1982. This finding resulted in invalidation of all PIV testing performed since 1982, including the retesting of PIVs after September 23, 1987.

- The licensee's response also states that on November 13, 1987, upon submittal of the proposed Technical Specifications (TS) regarding pressure isolation valve testing, the station immediately implemented the proposed TS by issuing a standing order to operating shift personnel. On December 21, 1987, the resident inspector noted that the standing order had not yet been issued. A standing order was subsequently placed in the shift engineer's office on December 21, 1987, as a result of the resident's inquiry.

C. NRC Conclusion

The NRC agrees that by November 24, 1987, the licensee completed all PIV testing on both units using calibrated instrumentation and in accordance with its Quality Assurance program; however, NRC involvement was required to ensure that test procedures were adequate to demonstrate the operability of PIVs and that the Technical Specification requirements were implemented in accordance with the licensee's commitment. The NRC has concluded that the licensee's corrective actions did not reflect an aggressive response to identified concerns.

IV. Assessment of Civil Penalty Escalation and Mitigation

A. Summary of Licensee Arguments for Mitigation

The licensee believes that credit should be given for prompt corrective actions in response to the identified concerns, coupled with its past performance with regard to responsiveness to regulatory concerns. The licensee states that implementation of the regulatory improvement program in February 1984 has improved awareness of regulatory requirements, and that the absence of Severity Level III violations since 1983, except for the HVAC issue, which was attributed to original construction, is indicative of improved regulatory performance. The licensee states that Zion Station does not diminish the importance of any Level IV or V violations that were incurred during the past years; however, those violations do not indicate a lack of management initiative or unresponsiveness to regulatory concerns.

B. NRC Evaluation

The NRC does not agree that the licensee took an aggressive approach to resolving identified concerns. Although the licensee's responsiveness to identified concerns has been enhanced by its regulatory improvement program, the program was ineffective in this case. A large number of quality program violations associated with PIV testing were identified. Although the licensee's responsiveness has been improving in many areas, in this case the corrective actions were not prompt and were only minimally acceptable.

The licensee's past performance in the area of testing has only been satisfactory (i.e., rated Category 2 in the latest SALP) and there have been several licensee event reports and violations related to testing and control of test equipment. Therefore, mitigation of the proposed civil penalty based on the licensee's past performance in this area is not considered appropriate.

C. NRC Conclusion

Based on the above, the NRC concludes that a sufficient basis has not been provided to mitigate the proposed civil penalty.

V. Conclusion

After careful consideration of the licensee's response, the NRC staff has concluded: (1) that Violations B and C described in the Notice occurred as stated, (2) that the licensee's corrective actions did not reflect an aggressive response to identified concerns, and (3) a sufficient basis was not provided for mitigation of the proposed civil penalty. The NRC staff considers the violations to collectively constitute cause for significant concern and are appropriately classified in the aggregate as a Severity Level III violation. Accordingly, a civil penalty in the amount of One Hundred Thousand Dollars (\$100,000) should be imposed.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

OCT 28 1987

Docket No. 50-369
License No. NPF-9
EA 87-163

Duke Power Company
ATTN: Mr. H. B. Tucker, Vice President
Nuclear Production Department
422 South Church Street
Charlotte, NC 28242

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT NO. 50-369/87-26)

This refers to the inspection conducted on August 3-7, 1987, at the McGuire Nuclear Plant, Huntersville, NC. The inspection included a review of the circumstances surrounding the inoperability of the Unit 1, Train A, Emergency Diesel Generator (D/G-1A), which occurred between July 26 and July 30, 1987. This event was identified by the plant staff and reported to the NRC. The report documenting this inspection was sent to you by letter dated September 10, 1987. As a result of this inspection, significant failures to comply with NRC regulatory requirements were identified, and accordingly, NRC concerns relative to the inspection findings were discussed at an enforcement conference held on September 15, 1987. The report documenting this conference was sent to you by letter dated October 9, 1987.

On July 26, 1987, at approximately 6:00 p.m., Removal and Restoration (R&R) No. 17-169 was issued by the Assistant Shift Supervisor to the Nuclear Equipment Operators (NEO) to remove Unit 1, Train "A," Nuclear Service Water Cooling Pump (RN-1A) and associated equipment from service to permit RN-1A oil sampling. The D/G-1A was included in Train "A" safety-related equipment that was removed from service to prevent its operation without cooling water. On July 27, 1987, the maintenance staff completed the oil sampling activities and two NEOs were directed to restore RN-1A and its associated safety-related equipment (as listed on R&R 17-169). The NEOs subsequently reported control power restored to all components and R&R 17-169 completed. At approximately 5:00 a.m., the control room declared all equipment associated with R&R 17-169 operable, despite the fact that the control power had not been restored to D/G-1A. As a result of the error, the D/G-1A control power breaker remained open, rendering D/G-1A and associated Train "A" safety-related equipment inoperable.

On July 29, 1987, a Reactor Operator observed that the D/G-1A control switch lights (red/green) in the control room were not illuminated which indicated that 125VDC control power was not available to start D/G-1A. Additionally, the Reactor Operator observed from the indication lights on the Unit 1 Bypass Panel that D/G-1A was inoperable. Despite the multiple indicators available to him, the Reactor Operator assumed the switch lamp socket was faulty and initiated a work request to repair the switch without attempting to verify the existence of control power to D/G-1A.

OCT 28 1987

On July 30, 1987, at approximately 3:30 a.m., R&R 17-185 was issued to remove RN-1A from service to support the rodding out of the motor cooler heat exchanger. While additional safety-related equipment was being removed from service the NEOs discovered the D/G-1A control power breaker in the de-energized position and reported their finding to the control room at approximately 5:30 a.m. At this time, D/G-1A had been in an inoperable status for more than 72 hours. On July 30, 1987, at approximately 12:30 p.m., the operability tests were completed for D/G-1A which had then been inoperable for 90.5 hours. This sequence of events resulted in D/G-1A being out of service for more than 72 hours, leaving the Train "A" emergency bus without an emergency power supply. Unit 1 did not commence plant shutdown within 72 hours to reach a HOT STANDBY condition as required by Technical Specifications.

There are two basic concerns with this event. First, we are concerned that your Independent Verification Procedures, as well as Removal and Restoration Procedures, were not followed by plant personnel. In particular, we are concerned that a Senior Reactor Operator failed to properly review the R&R document which, if done properly, would have resulted in his detecting the D/G-1A control power problem. Second, we are concerned about the adequacy of training for licensed Reactor and Senior Reactor Operators as well as NEOs. During the time period while D/G-1A was inoperable, six shift turnovers occurred without proper corrective action being taken for the lack of control power indication on the D/G-1A start/stop switch. The six shift turnovers also occurred without an adequate response to the D/G-1A inoperable indicator being illuminated on the Unit 1 Bypass panel, as required by Operations Management Procedure 2-2. Training for NEOs regarding the removal and restoration of safety-related equipment is also suspect and there are previous examples where inadequate training may have significantly contributed to operational problems.

There were two earlier events documented which contained a number of similarities to the incident for which this Notice is written. The first occurred on January 3, 1985, and is addressed in Station Investigation Report 2-85-01 which concerned an incident where a control board switch with indicator lights extinguished went unnoticed for an unknown period of time. The second incident occurred on October 22, 1985, and was addressed in Station Investigation Report 1-85-47 and Licensee Event Report 369/85-37. This second event listed improper independent verification as a primary cause in a Train "A" Engineered Safety Features actuation.

To emphasize the need to improve independent verification, strict compliance with procedures, and attention to detail, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of One Hundred Thousand Dollars (\$100,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violations described in the enclosed Notice have been categorized as a Severity Level III problem because of the safety significance involved. The base value of civil penalty for a Severity Level III violation or problem is \$50,000. It is recognized

OCT 28 1987

that the violations were eventually identified and reported by your staff; however, the violations involved significant errors and there was ample opportunity for discovery and correction. The escalation and mitigation factors in the Enforcement Policy were considered. The base civil penalty amount has been increased by 100 percent because of: (1) past poor performance in the area of concern as documented generally by Systematic Assessment of Licensee Performance (SALP) in the operations area and specifically by the similar occurrences discussed earlier, (2) the corrective actions taken on July 29, 1987 were not only inadequate and non-conservative, in that it was assumed the problem was in the control panel indicators and not in the diesel generator itself, but untimely in that it was not recognized promptly that the indicator light was out. Specifically, multiple shift turnovers occurred during the time the diesel generator was inoperable yet, none of the licensed operators involved recognized the significance of the multiple indications of the problem available to them.


You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements. Additionally, your future plant operations will be closely reviewed to assure the NRC that these events are, in fact, isolated problems.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL No. 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,


J. Nelson Grace
Regional Administrator

Enclosure:
Notice of Violation and
Proposed Imposition
of Civil Penalty

cc w/encl:
T. L. McConnell, Station Manager

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Duke Power Company
McGuire Unit 1

Docket No. 50-369
License No. NPF-9
EA 87-163

During an NRC inspection conducted on August 3-7, 1987, a violation of NRC requirements was 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 penalty are set forth below:

- A. Technical Specification 3.8.1.1 requires that two physically independent circuits between the offsite transmission network and the onsite essential auxiliary power system, and two separate and independent diesel generators be operable in Modes 1, 2, 3, and 4. With only one diesel generator operable restore the inoperable diesel generator to operable status within 72 hours or place the plant in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.

Contrary to the above, from 6:00 p.m. on July 26, 1987, until 12:30 p.m., on July 30, 1987, a total of 90.5 hours, while in Mode 1, diesel generator 1A was inoperable in that it was unable to be automatically started by an initiating signal due to the lack of control power. Further, the plant was not placed in HOT STANDBY as required.

- B. Technical Specification 6.8.1 requires in part that written procedures shall be implemented for the activities recommended in NUREG-0737, Item I.C.6 Independent Verification. Operations Management Procedure (OMP) 2-17 in part, implements these requirements for independent verification.

Contrary to the above, following the failure of the Nuclear Equipment Operators (NEO) to close the diesel generator 1A control power breaker which led to the July 26, 1987, violation of Technical Specification 3.8.1.1, OMP 2-17 was not properly implemented in that, the closure of the control power breaker for diesel generator 1A was not independently verified.

- C. 10 CFR 50 Appendix B, Criterion XVI requires in part, that conditions adverse to quality be promptly identified and corrected.

Contrary to the above, the inoperability of the 1A diesel generator which occurred on July 26, 1987, was not promptly identified in that, despite multiple indications of the problem in the control room the inoperable condition continued to exist, through multiple control room shift turn-overs, until July 30, 1987. Additionally, this condition was not properly corrected in that, when the indications of the problem with the 1A diesel generator control power were recognized, a work request was issued to correct only a perceived control room indicator problem.

This is a Severity Level III problem (Supplement I).
Cumulative civil penalty - \$100,000 (assessed equally between the violations)

Pursuant to the provisions of 10 CFR 2.201, Duke Power Company (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 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 penalty by letter 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 amount of the civil penalty proposed above, or may protest imposition of the civil penalty 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 penalty will be issued. Should the licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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.

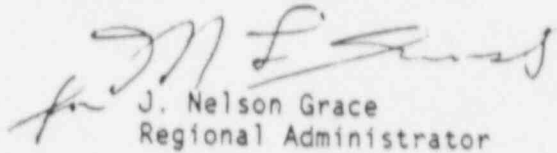
The responses to the Director, Office of Enforcement, noted above, Reply to a Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation should be addressed to: Director, Office of Enforcement,

Notice of Violation

- 3 -

U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region II and a copy to the NRC Resident Inspector at McGuire.

FOR THE NUCLEAR REGULATORY COMMISSION


J. Nelson Grace
Regional Administrator

Dated at Atlanta, Georgia
this 2nd day of October 1987



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAR 03 1988

Docket No. 50-369
License No. NPF-9
EA 87-163

Duke Power Company
ATTN: Mr. H. B. Tucker, Vice President
Nuclear Production Department
422 South Church Street
Charlotte, NC 28242

Gentlemen:

SUBJECT: ORDER IMPOSING A CIVIL MONETARY PENALTY

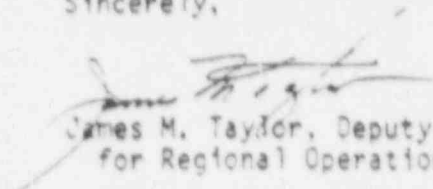
This refers to your letter dated November 25, 1987, in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you by our letter dated October 28, 1987. Our letter and Notice describe three violations, identified during an NRC inspection conducted on August 3-7, 1987. To emphasize the need to improve independent verification, strict compliance with procedures, and attention to detail a civil penalty of One Hundred Thousand Dollars (\$100,000) was proposed.

In your response, you admitted that the subject violations occurred and you did not contest imposition of the base civil penalty or the proposed Severity Level; however you disputed the escalation of the base civil penalty on the grounds that the bases cited for escalation are either inconsistent with the factors set forth in the Enforcement Policy or are otherwise improper.

After consideration of your response, we have concluded for the reasons given in the Appendix attached to the enclosed Order Imposing Civil Monetary Penalty that the 100 percent escalation of the base civil penalty is appropriate. Accordingly, we hereby serve the enclosed Order on Duke Power Company imposing a civil monetary penalty in the amount of One Hundred Thousand Dollars (\$100,000). We will review the effectiveness of your corrective actions during a subsequent inspection.

In accordance with Section 2.790 of the NRC's "Rule of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

Sincerely,


James M. Taylor, Deputy Executive Director
for Regional Operations

Enclosure:
Order Imposing Civil Monetary Penalty
with Attachment

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of)
DUKE POWER COMPANY)
McGuire Nuclear Station Unit 1)

Docket No. 50-369
License No. NPF-9
EA 87-163

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Duke Power Company (licensee) is the holder of Operating License No. NPF-9 issued by the Nuclear Regulatory Commission (NRC/Commission) on July 8, 1981. The license authorizes the licensee to operate McGuire Nuclear Station, Unit 1 in accordance with the conditions specified therein.

II

A special inspection of the licensee's activities was conducted on August 3-7, 1987. The results of that inspection indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated October 28, 1987. The Notice states the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalty proposed for the violations. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalty by letter dated November 25, 1987 admitting the violations, but disputing the proposed escalation of the base civil penalty.

III

After consideration of the licensee's response and the statements of fact, explanation, and argument for mitigation contained therein, the Deputy Executive

Director for Regional Operations has determined as set forth in the Appendix to this Order that the escalation of the penalty proposed for the violations designated in the Notice of Violation and Proposed Imposition of Civil Penalty should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDER THAT:

The licensee pay a civil penalty in the amount of One Hundred Thousand Dollars (\$100,000) within 30 days of the date of this order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

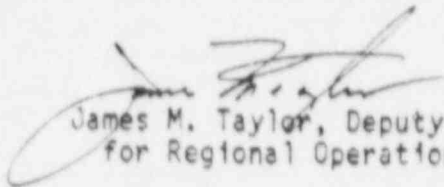
The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing should be clearly marked as a "Request for an Enforcement hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector, McGuire Nuclear Station.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be

effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issue to be considered at such hearing shall be whether the portion of the proposed penalty above the base civil penalty should be imposed, in whole or in part.

FOR NUCLEAR REGULATORY COMMISSION



James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Bethesda, Maryland
this 3rd day of March 1988

APPENDIX

EVALUATIONS AND CONCLUSIONS

On October 28, 1987, a Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was issued for violations identified during a routine NRC inspection. Duke Power Company responded to the Notice of November 25, 1987. In its response, the licensee admitted that the subject violations occurred and did not contest the base civil penalty or the proposed Severity Level of the violations; however, the licensee did contest escalation of the base civil penalty. The NRC's evaluations and conclusions regarding the licensee's arguments are as follows:

A. General Arguments

Summary of Licensee's Response

The licensee contends that the NRC escalated the base civil penalty because of past poor performance and inadequate corrective action related to independent verification and failure to follow procedures in the area of plant operations. The licensee believes that reasons given by the NRC for escalation are either inconsistent with the factors set forth in the Enforcement Policy or are otherwise improper.

NRC Evaluation of Licensee's Response

The NRC letter of October 28, 1987, included the following statement:

The base civil penalty amount was increased by 100 percent because of: (1) past poor performance in the area of concern as documented generally by Systematic Assessment of Licensee Performance (SALP) in the operations area and specifically by the similar occurrences discussed earlier [see page 2 of the October 28, 1987 letter paragraphs 2 and 3 regarding IVP], (2) the corrective actions taken on July 29, 1987, were not only inadequate and non-conservative, in that it was assumed the problem was in the control panel indicators and not in the diesel generator itself, but untimely in that it was not recognized promptly that the indicator light was out. Specifically, multiple shift turnovers occurred during the time the diesel generator was inoperable yet, none of the licensed operators involved recognized the significance of the multiple indications of the problem available to them.

The NRC staff's evaluation of the licensee's arguments concerning the details associated with the above summary statement will be addressed in specific below.

B. Arguments Regarding Past Performance

1. Effectiveness of previous corrective action

a. Independent Verification Program (IVP)

Licensee Assertion

The licensee cites a number of efforts to improve their IVP subsequent to a March 1983 incident at Oconee in an effort to

demonstrate how these previous corrective actions have been successful in minimizing future problems. In the licensee's view, this justifies removal of the escalation for prior poor performance.

NRC Evaluation

Five changes were made to the McGuire IVP prior to 1984. No subsequent changes are relied upon in the licensee's argument prior to the current incident. The licensee then cites statistics to show a declining trend in the number of related incidents over four years from three per year to one per year.

The reason for escalation was poor performance. The NRC staff made no contention that there had been no progress in improving the IVP. Using the licensee's statistics, we note that all eight problems cited by the licensee in the IVP have occurred since full implementation of the five changes to the program. No subsequent changes were made to the IVP over a four year period preceding the current incident even though additional violations have occurred. Thus, it cannot be found that earlier changes in the IVP constituted adequate corrective action insofar as the subject violations are concerned. Therefore, escalation based on continued poor performance in IVP is appropriate.

b. Personnel Failure to Follow Procedures

Licensee Assertion

The licensee cites corrective actions and a decreasing number of Reportable Events which are argued to be indicative of a declining number of personnel errors. It is the licensee's view that such trends support removal of escalation for prior poor performance.

NRC Evaluation

It is the staff's position that the licensee's statistical trends alone are not sufficient to weigh against escalation. First, the relationship between the corrective actions cited by the licensee and the trends is not readily apparent given the dates of implementation of the corrective actions and the intervening unfavorable SALP findings. Second, statistics indicating an overall declining trend in personnel errors do not provide assurance that progress has been made in a specific area such as IVP or that recurring problems are being prevented. Finally, the occurrence of a significant problem such as the inoperability of DG-1A, which involved a number of procedural as well as cognitive personnel errors, calls into question the effectiveness of past corrective actions regardless of statistical trends. This incident underscores the need to make the determination of whether escalation is appropriate on a qualitative as well as quantitative basis.

2. Overall Performance (prior SALP reports)

Licensee Assertion

The licensee contends that recent events weigh against the NRC's reliance upon the SALPs for the purpose of escalation, specifically the recently awarded category 2 SALP rating in Operations.

NRC Evaluation

The licensee relies heavily on the most recent SALP as evidence of improvement. The licensee assumes that the most recent category 2 SALP rating should be considered as the primary indication of previous performance for escalated enforcement.

There are several points that must be noted in this regard: (a) previous performance, for purposes of escalated enforcement, includes more than consideration of numerical SALP ratings or the fact that the previous SALP rating shows improvement, (b) despite the recent improvement in the SALP rating, the licensee's past performance in specific areas has not been good, (c) a SALP rating of 2 does not necessarily mean that a penalty may not be escalated.

3. Prior Enforcement History

Licensee Assertion

The licensee asserts that the two events discussed should not be used as a basis for escalating a civil penalty for prior enforcement history because one of the events was not cited in a Notice of Violation and because the events occurred more than two years ago (January 3 and October 22, 1985).

NRC Evaluation

The NRC is not required by the Enforcement Policy to limit in its consideration of the basis for escalation for "Past Performance" (10 CFR Part 2, Appendix C, Section V.c.3) to the licensee's prior enforcement history. (See also "Prior Notice of Similar Events" id V.c.4.) Information in inspection reports, whether or not used to support a violation, is relevant for past performance and provides notice for the need for corrective action. Accordingly, the NRC's reference, in the October 28, 1987 letter, to the two events, which were noted as similar to the incident for which the instant notice was issued, was appropriate. It is further noted that the emphasis of the NRC's reference to the two events was that the corrective action for those events was not successful in preventing the current incident.

The NRC typically reviews events over an approximate two year period in evaluating past performance. In this case the Notice of Violation was issued on October 28, 1987, the inspection took place on August 3-7, 1987; and the violations occurred between July 26 and 30, 1987. Therefore, consideration of the two events that occurred in 1985 is appropriate especially given the distinct similarities that exist between the recent incident and those events.

C. Arguments Regarding Corrective ActionsLicensee Assertion

The licensee contends that there are two separate reasons for objecting to the NRC's assertion that improper corrective action should serve as the basis for escalating the base civil penalty. The licensee's reasons for objecting are listed below:

1. such use constitutes improper double counting (i.e., improper corrective action cannot serve as basis for both the violation and the escalation), and
2. conflict with the Enforcement Policy (i.e., the licensee asserts that the policy prohibits considering actions taken before discovery of the problem as "corrective.")

NRC Evaluation

The violation for failure to take corrective actions (Violation C of the Notice of Violation) was cited because of the operator's failure to recognize the significance of the multiple indications of the problem available to him. Further, when the problem was identified, it was improperly diagnosed as a faulty switch. The basis for escalation rests on the fact that multiple shift turnovers occurred, with the diesel generator 1A (DG-1A) in fact inoperable for approximately 90 hours. Each turnover provided an opportunity to identify and correct the violation. The Enforcement Policy (10 CFR 2, Appendix C) allows for escalation based on duration of the violation. Paragraph B.V.5(3) of the Policy states that whether or not a licensee is aware or should have been aware of a violation that continues for more than a day, the civil penalty imposed for the violation may be increased to reflect the added significance resulting from the duration of the violation. The reference to corrective action in the October 28, 1987 cover letter's discussion of escalation was not intended to address the factor of inadequate corrective action but rather the duration caused by inadequate action on July 29, 1987.

In summary, the violation (Violation C of the Notice of Violation) is based on the failure of the operator to recognize the significance of the multiple indications of DG-1A inoperability, as well as the improper diagnosis of the problem, while the escalation is based on the duration of the event. It is not impermissible to issue a citation for failure to take corrective action and at the same time escalate a penalty based on the significance of that failure.

D. NRC Conclusion

The purpose of this penalty is remedial. It is designed to emphasize (1) the need to maintain lasting corrective action and (2) that performance of the type underlying this civil penalty action cannot be accepted. The staff recognizes that Duke is making to improve its performance. But for those activities, the penalty might have been higher.

An adequate basis for reduction of the 100 percent escalation of the base civil penalty has not been presented by the licensee. Consequently, the proposed civil penalty in the amount of One Hundred Thousand Dollars (\$100,000) should be imposed.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
811 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

MAR 14 1988

Docket No. 50-298
License No. DPR-46
EA 87-237 and EA 88-02

Nebraska Public Power District
ATTN: George A. Trevors
Division Manager - Nuclear
Support
Post Office Box 499
Columbus, Nebraska 68601

Gentlemen:

SUBJECT: NOTICES OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORTS 50-298/87-27, 50-298/87-31, AND
50-298/87-32)

This refers to the inspections conducted during the periods October 26-29, November 1-30, and December 1-21, 1987, respectively at the Cooper Nuclear Station, Brownville, Nebraska, by personnel of the NRC Region IV office. During these inspections, NRC personnel identified one violation and reviewed the circumstances surrounding three licensee identified violations. These violations were discussed at an enforcement conference on January 28, 1988, at the NRC Region IV office in Arlington, Texas.

The inspections conducted on October 26-29, and November 1-30, 1987, reviewed the circumstances surrounding violations that included: (a) an inadequate search of a contractor vehicle that entered the protected area with undetected ammunition in the vehicle, (b) the issuing of the wrong encoded access badges to individuals on four occasions between December 1986 and October 1987, and (c) the failure to identify a key controlling access to a vital area as a vital area key which presented the possibility for a compromise.

To emphasize the need for increased management attention to ensure that the Physical Security Plan is followed, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Twenty-Five Thousand Dollars (\$25,000) for the inadequate search of a contractor vehicle. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violation described in the enclosed Notice has been categorized as a Severity Level III violation. The other two security violations have been categorized as Severity Level IV violations. The base value of a civil penalty for a Severity Level III violation is \$50,000. The NRC Enforcement Policy allows for reduction of a civil penalty under certain circumstances. In this case, the base civil penalty is reduced by 50 percent because of your identification and reporting of the search incident.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

An additional violation was reviewed during the inspection conducted December 1-21, 1987. This violation involved a two inch motor operated valve installed to bypass the Drywell Exhaust Inboard Isolation Valve. The valve was installed in 1981 without the automatic isolation feature required by the Updated Safety Analysis Report. Not powering the bypass valve from a source that would automatically re-energize after a loss of off site power set up the potential for a two inch diameter release path from containment through the Standby Gas Treatment System under certain circumstances.

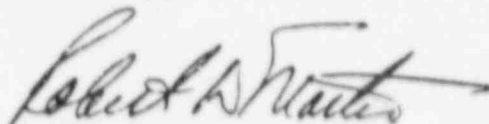
A second Notice of Violation is also enclosed for the problem associated with the bypass for the Drywell Exhaust Inboard Isolation Valve. In accordance with the Enforcement Policy the violation described in that Notice has also been categorized as a Severity Level III violation. The base civil penalty for this second Notice has been mitigated by 100 percent because of your self identification and prompt reporting of the problem as well as your corrective actions. The NRC encourages you to pursue future review programs such as the one which allowed you to identify this problem.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notices when preparing your response. In your responses, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your responses to these Notices, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

Some of the material enclosed herewith contains Safeguards Information as defined by 10 CFR Part 73.21 and its disclosure to unauthorized individuals is prohibited by Section 147 of the Atomic Energy Act of 1954, as amended. Therefore, the material will not be placed in the Public Document Room.

The responses directed by this letter and the enclosed Notices are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



Robert D. Martin
Regional Administrator

Enclosure:
Notice of Violation and
Proposed Imposition
of Civil Penalty
Notice of Violation

cc: Nebraska Radiation Control Program Director
(Non-Safeguards Portions Only)

NOTICE OF VIOLATION

Nebraska Public Power District
Cooper Nuclear Station

Docket No. 50-298
License No. DPR-46
EA 88-02

During an NRC inspection conducted on December 1-21, 1987, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987), the violation is listed below:

10 CFR 50.54(a)(1) requires that each nuclear power plant subject to the quality assurance criteria in 10 CFR 50, Appendix B, shall implement the quality assurance program described or referenced in the Safety Analysis Report, including changes to that report.

10 CFR Part 50, Appendix B, Criterion III, requires that measures shall be established to assure that applicable regulatory requirements and the design basis are correctly translated into specifications, drawings, procedures, and instructions and that design changes shall be subject to design control measures commensurate with those applied to the original design.

10 CFR 50.59(a)(1) requires, in part, that a licensee obtain prior Commission approval prior to making a change to the facility that involves an unreviewed safety question.

10 CFR 50.59(a)(2) states, in part, that a proposed change shall be deemed to involve an unreviewed safety question if the consequences of an accident or malfunction of equipment previously evaluated in the safety analysis report may be increased.

Section I 5.2.6.2.5 of the Cooper Nuclear Station Updated Safety Analysis Report (USAR) states that piping that both penetrates the primary containment structure and could serve as a path for the uncontrolled release of radioactive material to the environs shall be automatically isolated whenever such uncontrolled radioactive material release is threatened. Section XIV 6.3 of the USAR describes the design basis Loss of Coolant Accident (LOCA).

Contrary to the above, the plant design basis was not properly implemented in that, Drywell Exhaust Inboard Isolation Bypass Valve (PC-MOV-306 MV) was installed by Design Change 80-064 without the automatic isolation feature required by the USAR by powering it from an electrical bus which would not automatically be re-energized on a loss of offsite power. From June 17, 1981, when Design Change 80-064 was completed without prior Commission approval, until November 25, 1987, an unreviewed safety question existed in that, upon the occurrence of a design basis LOCA with a loss of offsite power, the consequences of the accident may have been increased. Specifically, if the LOCA and loss of offsite power, occurred while

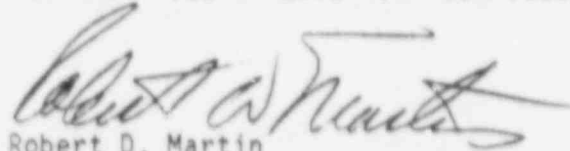
PC-MOV-306MV and the Drywell Exhaust Outboard Isolation Valve (PC-AOV-246AV) were open with a concurrent failure of the air operated PC-AOV-246AV to shut, a two inch diameter release path from Primary Containment through the Standby Gas Treatment System would have existed.

This is a Severity Level III violation (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, Nebraska Public Power District 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 the 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 taken. Consideration may be given to extending the response time for good cause shown.

The responses to the Director, Office of Enforcement, noted above (Reply to a Notice of Violation, 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, Cooper Nuclear Station.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert D. Martin
Regional Administrator

Dated at Arlington, Texas,
this ¹⁴ day of March 1988.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

March 14, 1988

Docket No. 50-220
License No. DPR-63
EA 87-224

Niagara Mohawk Power Corporation
ATTN: Mr. C. V. Mangan
Senior Vice President
301 Plainfield Road
Syracuse, New York 13212

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC Inspection Report Nos. 50-220/87-21 and 50-410/87-39)

This refers to the NRC inspection conducted between October 5-30, 1987, at Nine Mile Point, Unit 1, Scriba, New York which included a review of the inservice inspection program of Unit 1. During the inspection, violations of NRC requirements were identified. The inspection report was sent to you on November 10, 1987. On January 7, 1988, an enforcement conference was conducted with you and members of your staff to discuss the violations, their causes and your corrective actions.

The violations, which are described in the enclosed Notice of Violation and Proposed Imposition of Civil penalty (Notice), involve (1) operation of the Unit 1 reactor between June 1986 and September 1987 without dispositioning certain weld flaw indications identified during the ten year Inservice Inspection (ISI) examinations conducted during the 1986 refueling outage which ended in June 1986, (2) failure to take appropriate corrective actions when subsequent opportunities existed during that time to identify and correct the ISI deficiency, and (3) failure by the corporate engineering and corporate licensing staff to immediately notify appropriate operations department supervision and pursue resolution when these nonconformances were identified in August and September of 1987.

The NRC recognizes that your review of these deficiencies in September 1987 indicated that these flaws would not have affected the ability of these systems to perform their intended safety function. Nonetheless, the NRC is concerned that (1) your administrative system was not adequate to ensure that the proper personnel were notified of the ISI deficiencies and to ensure that the deficiencies were properly dispositioned prior to startup in June 1986, and (2) multiple opportunities existed between June 1986 and September 1987 to identify and correct these deficiencies, yet the deficiencies went uncorrected. For example, during discussions in November 1986 between NRC personnel and the Unit 1 Superintendent concerning the improper dispositioning of an ISI deficiency involving certain heat exchangers, the NRC raised questions as to whether similar problems existed elsewhere. Further, during the exit meeting by your Quality Assurance Department in July 1987 and in occurrence reports

issued by that department in September 1987, these issues were identified to plant management personnel. However, effective action was not promptly taken to have these underlying problems corrected.

Further, on January 15, 1988, a member of your staff informed the NRC that other ISI deficiencies were identified on January 9, 1988, in that several ten-year ISI inspections, which had been scheduled to be performed during the 1986 refueling outage, were either missed or inappropriately deferred. Although these recent findings are not described in the enclosed Notice, they represent another example of a lack of adequate management attention to, and control of, the ISI program. This may be subject to further correspondence.

Collectively, the ISI deficiencies are an additional symptom of problems expressed by Region I in the SALP Report issued on July 27, 1987 and in a letter, dated April 29, 1987, transmitting a Notice of Violation and a \$50,000 civil penalty for violations of maintenance, testing, and radiation protection program requirements at Unit 1. In the April 29 letter, the NRC expressed concern regarding the effectiveness at the facility in ensuring that identified problems are brought to management for resolution, adequately analyzed for cause, and appropriately corrected. Furthermore, in the July SALP, in the areas of "Assurance of Quality" and "Maintenance", both of which were rated as Category 3, the NRC also indicated that (1) plant management did not seek out problems from first line supervision and this attitude did not foster identification of problems or elevation of problems to the level appropriate for corrective action; and (2) there was a lack of interdepartmental coordination which could affect safety.

Although the NRC recognizes that corrective actions had been developed and are in the process of being implemented in response to those underlying concerns, these violations, as well as the recent ISI findings identified in January 1988, demonstrate the need for expediting completion of these improvements and monitoring their effectiveness. Improvements needed include: (1) better administrative systems for ensuring that all deficiencies that could affect the operability of safety systems are appropriately resolved; (2) improved coordination and communication between various departments, and improved conduct of the Site Operations Review Committee (SORC) meetings, to assure adequate assessment and appropriate resolution of identified deficiencies; and (3) more aggressive actions by all personnel in your organization in identifying, assessing and correcting problems. These improvements are needed promptly not only to ensure that the ISI program is appropriately implemented, but also to ensure that the reactor is operated safely and in accordance with the facility technical specifications.

To emphasize the importance of ensuring that significant deficiencies are promptly and completely resolved, including deficiencies in the ISI program at Unit 1, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of One Hundred Thousand Dollars (\$100,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C

(1987) (Enforcement Policy), the violations described in the enclosed Notice have been categorized in the aggregate as a Severity Level III problem. The base value of a civil penalty for a Severity Level III violation or problem is \$50,000. The base civil penalty amount has been increased by 100% because of your prior poor performance in the area of concern as demonstrated by: (1) the similarity of these concerns to the concerns raised in both the letter transmitting a previous civil penalty on April 29, 1987 (Reference: EA 87-45) and in the July 27, 1987 SALP report, and (2) ineffective prior corrective actions.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. Further, you should describe in detail, as discussed at the enforcement conference, your plans for improving the pace of improvements in management controls regarding identifying and correcting deficiencies. This is especially important in view of your prior enforcement history which, since 1980, includes six civil penalties and an order and which dictates the necessity for your current corrective actions to be prompt, effective, and lasting. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspection, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice" Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



William T. Russell
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:

T. E. Lempges, Vice President, Nuclear Generation
J. A. Perry, Vice President, Quality Assurance
T. Perkins, General Superintendent, Nuclear Generation
W. Hansen, Manager Corporate Quality Assurance
T. Roman, Unit 1 Station Superintendent
J. Aldrich, Unit 1 Superintendent, Operations
C. Beckham, Manager Nuclear Quality Assurance Operations
W. Drews, Technical Superintendent
Troy B. Conner, Jr. Esquire
John W. Keib, Esquire
Director, Power Division
Director of Public Service, State of New York
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
State of New York
A. Pinter, NMPC Site Licensing
R. Abbott, Station Superintendent, Unit 2
R. Smith, Unit 2 Superintendent of Operations

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Niagara Mohawk Power Corporation
Nine Mile Point, Unit 1

Docket No. 50-220
License No. DPR-63
EA 87-224

During an NRC inspection conducted on October 5-30, 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, Apperidix 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 penalty are set forth below:

- A. Technical Specification Limiting Conditions for Operation (LCO) 3.1.3 and 3.1.4, require that both Emergency Cooling systems be operable whenever the reactor water temperature is greater than 212°F, and both Core Spray systems be operable whenever irradiated fuel is in the reactor vessel. For Quality Group A, B, and C components to be considered operable, Technical Specification LCO 3.2.6.a.1 requires that these components satisfy the requirements for inservice inspection in Section XI of the ASME Boiler and Pressure Vessel Code.

Contrary to the above, from June 21, 1986 until September 8, 1987 and while the reactor water temperature was greater than 212°F and irradiated fuel was in the reactor vessel, components in both Emergency Cooling Systems and both Core Spray Systems (Quality Group A, B, or C) were inoperable in that the requirements for inservice inspection of Section XI of the ASME Boiler and Pressure Vessel Code were not met. Specifically, inservice inspection weld flaw indications identified prior to the June 1986 startup were not dispositioned, as required by the inservice inspection program, prior to declaring the systems operable.

- B. 10 CFR Part 50, Appendix B, Criterion XVI requires that measures be established to assure that conditions adverse to quality and nonconformances are promptly identified and corrected.

Contrary to the above, the measures for promptly identifying and correcting conditions adverse to quality did not assure correction of nonconformances in the inservice inspection program identified during the 1986 refueling outage. Specifically,

1. Deficiency/Corrective Action Reports (DCAs) issued prior to the end of the 1986 outage documented inservice inspection weld flaw indications, but the deficiencies were not formally dispositioned prior to the reactor startup in June 1986 (i.e., DCA numbers 41, 120, 140, and 200).

2. During an NRC inspection conducted between November 17, 1986 to January 4, 1987, and in the NRC Inspection Report (50-220/86-26) issued on February 11, 1987, the NRC indicated that (a) a Reactor Building Closed Loop Cooling heat-exchanger had failed its hydrostatic test in May 1986, and (b) although ISI personnel requested disposition of this finding via a DCA, the component was placed into service without the test failure being properly addressed. Subsequent to this inspection, this programmatic deficiency concerning disposition of ISI findings was not corrected as evidenced by the fact that other undispositioned inservice inspection deficiencies also existed at that time but were not identified and corrected.
 3. An audit by the licensee's QA organization in July 1987 (Audit Report No. SY-RG-IN-87-001) identified several nonconformances in the inservice inspection procedure for control of DCAs. However, the audit deficiencies were not reviewed for the potential impact on current plant operations, even in light of the inservice inspection deficiencies identified in November 1986.
- C. 10 CFR Part 50, Appendix B, Criterion XV requires, in part, that procedures be established for the identification of nonconforming conditions, and the documentation, disposition and notification of affected organizations, so that these nonconformances may be reviewed and accepted, rejected, repaired or reworked in accordance with documented procedures. Further 10 CFR Part 50, Appendix B, Criterion V requires that activities affecting quality be accomplished in accordance with these procedures.

Quality Assurance Topical Report for Nine Mile Point, Section 15.2, Quality Administrative Procedure 14.20, entitled "Preparation of Occurrence Reports", and Administrative Procedure 10.2.2, entitled "Procedure for Reporting Variation from Normal Plant Operations, Defects and Noncompliance", require that an Occurrence Report be written and Operations Department management be notified immediately of any condition of nonconformance which could affect the operability of a safety system or compliance with a Technical Specification requirement.

Contrary to the above:

1. On August 31, 1987, a Nonconformance Report was prepared by the Quality Assurance Department concerning the improper dispositioning of weld flaw indications described in five Deficiency/Corrective Action Reports issued prior to the June 1986 startup, and Operations management was not informed of this nonconformance;
2. On September 8, 1987, the corporate licensing and engineering staff did not initiate an Occurrence Report nor contact Operations management immediately concerning the potential inoperability of safety systems and potential violation of a technical specification requirement because of the unresolved weld flaw indications.

Collectively, the violations have been categorized in the aggregate as a Severity Level III problem.

Cumulative Civil Penalty - \$100,000 - assessed equally among the violations.

Pursuant to the provisions of 10 CFR 2.201, Niagara Mohawk Power Corporation (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 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. 2242, this response shall be submitted under oath or affirmation.

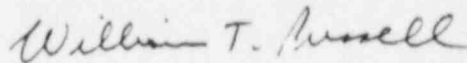
Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, or money order payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation(s) 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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 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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, and a copy to the NRC Resident Inspector, Nine Mile Point, Unit 1.

FOR THE NUCLEAR REGULATORY COMMISSION



William T. Russell
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 4 day of March 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I

475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

April 12, 1988

Docket No. 50-423
License No. NPF-49
EA 88-61

Northeast Nuclear Energy Company
ATTN: Mr. E. J. Mroccka
Senior Vice President - Nuclear
Engineering and Operations Group
P. O. Box 270
Hartford, Connecticut 06141-0270

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC Inspection Report No. 50-423/88-03)

This refers to the special NRC inspection conducted on January 19-29, 1988 at Millstone, Unit 3 to review an event which occurred on January 19, 1988 involving an increase in reactor pressure while the reactor was in cold shutdown. This event was promptly reported to the NRC resident inspector by a member of your staff. The inspection report was sent to you on February 22, 1988. At the time of this pressure transient, and for approximately three days prior to the date, none of the facility's three available overpressure protection systems were operable as required. Failure to have at least one system operable constitutes a violation of a technical specification limiting condition for operation. On March 8, 1988, an enforcement conference was conducted with Mr. W. Romberg and other members of your staff to discuss the violation, its causes, and your corrective action.

The violation is described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty. The facility technical specifications require that one of the following overpressure protection systems be operable: (1) the two RHR suction relief valves with an appropriate lift setting; (2) the two power-operated relief valves (PORVs) with appropriate low pressure lift settings, or (3) an appropriately sized RCS vent path with the RCS depressurized. Although your staff believed that the cold overpressure protection function of the PORVs was operable, this function was inoperable because certain Solid State Protection System (SSPS) output relays were not functional due to the SSPS being in the "Test" mode. As a result, when one of the two RHR suction valves was closed on January 16, it placed the facility in violation of a technical specification. When the second RHR suction valve was isolated on January 19, due to a fuse pulling incident, the pressure transient resulted.

The NRC is concerned that this event demonstrated a number of deficiencies in control of operations at Millstone Unit 3. For example, the procedure for ensuring operability of the Cold Overpressure Protection System (COPS) did not adequately address the operability requirements of supporting equipment. Further, there was and still is no positive indication in the control room to show that the COPS is inoperable. In addition, Instrumentation and Control (I&C) personnel who pulled the fuses that resulted in the second RHR valve

becoming isolated were not adequately trained in the complex circuitry inter-relationships which were affected by fuse pulling, and the activity was performed without a procedure and without an adequate and formal review.

This event demonstrates the need for (1) better control of the configuration of equipment at the facility, (2) better planning of activities that could affect that control, (3) improved procedures for performing those activities, and (4) improved training of personnel performing those activities. To emphasize these needs, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Fifty Thousand Dollars (\$50,000) for the violation described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violation described in the enclosed Notice has been categorized at a Severity Level III. The base value of a civil penalty for a Severity Level III violation is \$50,000. In considering the escalation and mitigation factors of the Enforcement Policy the NRC recognized your prompt and extensive corrective actions. However, no adjustment of the civil penalty was deemed appropriate because of the duration and significance of the violation.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



William T. Russell
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

See next page for cc's.

cc w/encl:

W. D. Romberg, Vice President, Nuclear Operations
D. O. Nordquist, Manager of Quality Assurance
R. M. Kacich, Manager, Generation Facilities Licensing
S. E. Scace, Station Superintendent
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Senior Resident Inspector
State of Connecticut

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Northeast Nuclear Energy Company
Millstone, Unit 3

Docket No. 50-423
License No. NPF-49
EA 88-61

During an NRC inspection conducted on January 19-29, 1988, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action," 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 violation and associated civil penalty are set forth below:

Technical Specification Limiting Condition for Operation (LCO) 3.4.9.3 requires in part that whenever the reactor is in Mode 5, at least one of the following Overpressure Protection Systems shall be operable:

- a. two residual heat removal RHR suction relief valves, each with a setpoint of 450 psig; or,
- b. two power-operated relief valves (PORVs) with lift settings that do not exceed the pressure-temperature limits established by Figures 3.4-4a and 3.4-4b for 4 and 3 loop operation; or,
- c. the reactor coolant system (RCS) depressurized with an RCS vent of greater than or equal to 7.0 square inches.

Technical Specification LCO Action Statement 3.4.9.3.b requires that with both required PORVs inoperable, actions shall be taken within the next eight hours to either restore both RHR suction relief valves to operable status, or depressurize and vent the RCS through a 7 square inch or larger vent.

Contrary to the above, between 9:10 p.m. on January 16, 1988 and 4:49 p.m. on January 19, 1988, with the reactor in Mode 5 both PORVs were inoperable in the cold overpressure protection mode (i.e. they would not lift at their required low pressure lift settings) and during that time, one of the two RHR suction relief valves had been rendered inoperable for maintenance, and the RCS was not depressurized and vented through at least a 7 square inch or larger vent. The PORV's were inoperable in the cold overpressure protection mode because they rely, in this mode, upon the operability of the Solid State Protection System (SSPS), and the SSPS was inoperable because it was in the test mode.

This is a Severity Level III violation (Supplement 1).

Civil Penalty-\$50,000

Pursuant to the provisions of 10 CFR 2.201, Northeast Nuclear Energy Company (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 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.

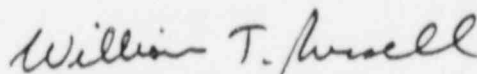
Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, or money order payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, and a copy to the NRC Resident Inspector, at Millstone.

FOR THE NUCLEAR REGULATORY COMMISSION



William T. Russell
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 12 day of April 1980



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

MAY 4 1988

Docket No. 50-285/88-05
License No. DPR-40
EA 88-72

Omaha Public Power District
ATTN: R. L. Andrews, Division Manager-
Nuclear Production
1623 Harney Street
Omaha, Nebraska 68102

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC INSPECTION REPORT NO. 50-285/88-05)

This refers to the inspection conducted on February 1-5, 1988, at the Fort Calhoun Station, by personnel of Region IV, and the Office of Nuclear Reactor Regulation. During this inspection, NRC personnel identified several violations that were discussed at an enforcement conference on March 15, 1988, at the NRC Region IV office in Arlington, Texas.

The violations identified during the inspection included the failure to provide training to health physics (HP) personnel, failure to secure a door and control keys for a very high radiation area, failure to follow procedures for personnel in a very high radiation area and posting of controlled surface contamination areas, and failure to issue a written policy statement for the respiratory protection program. Because of the apparent ineffectiveness of earlier corrective actions and the repeat violations, we are concerned that your program for problem identification and correction has been ineffective and there appears to be a degradation of the overall radiation protection program effectiveness.

Collectively, the violations indicate a declining trend in radiation protection control that is also reflected by the reduced rating in the applicable category of the last SALP report for your facility. In this particular case, the root cause of these violations appeared to be a lack of commitment by management and HP personnel to develop, maintain and adhere to procedures which ensure conformance to the facility technical specifications and NRC regulations.

These deficiencies demonstrate that a better understanding of the regulatory requirements and facility procedures is needed and that greater attention to detail in performing duties is necessary. Management must pursue an aggressive audit and review program to assure that the Radiation Protection Program is properly implemented.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

MAY 4 1988

Omaha Public Power District

- 2 -

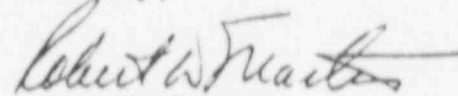
To emphasize the need to improve radiation protection control, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of One Hundred Twelve Thousand Five Hundred Dollars (\$112,500) for the violations described in the enclosed notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the two (2) violations described in the enclosed notice have been categorized as Severity Level III violations. The base value of a civil penalty for a single Severity Level III violation is \$50,000. The escalation and mitigation factors in the Enforcement Policy were considered. We recognize that you identified Violation A and have initiated comprehensive corrective action for it. These corrective actions have been taken not only because of your health physics concerns but also because of other performance issues. Given your prior enforcement history involving unlocked doors to very high radiation areas which included a Severity Level III violation on May 22, 1986 and a civil penalty on January 19, 1988, these corrective actions are not considered unusually prompt and extensive as to warrant full mitigation of the civil penalty. However, in view of the above, the base civil penalty amount for the first violation has been increased by only 25 percent. The escalation and mitigation factors in the enforcement policy were also considered for Violation B and no adjustment was deemed appropriate.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. As appropriate, you may reference your recent March 31, 1988 response. After reviewing your response, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



Robert D. Martin
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc:
Nebraska Radiation Control Program Director

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Omaha Public Power District
Fort Calhoun Station

Docket No. 50-285
License No. DPR-40
EA 88-72

During an NRC inspection conducted on February 1-5, 1988, 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:

A. Very High Radiation Area Control

Technical Specification 5.11.2, requires, in part, that areas with radiation intensities greater than 1000 mrem/hr (Very High Radiation Area) be provided with locked doors to prevent unauthorized entry into such areas.

Contrary to the above, at approximately 4:25 p.m., on January 25, 1988, the licensee's auxiliary building operator determined that the door leading into room 11 (A Very High Radiation Area) was not locked.

This is a repeat violation.

This is a Severity Level III violation (Supplement IV)

Civil Penalty - \$62,500.

B. Radiation Protection Program Degradation

1. Failure to Provide Training

Technical Specification 5.4.1 states, in part, that a retraining program for the plant staff shall be maintained and shall meet or exceed the requirements of Section 5.5 in ANSI N18.1-1971. Training Program Master Plan 14, Section 8.2.2, states, in part, that radiation protection technicians will complete the minimum requalification training requirements yearly (not to exceed 15 months) as defined for their current job position.

Contrary to the above, as of February 5, 1988, three radiation protection technicians had not completed requalification training requirements since August 1986, August 1984, and August 1983, respectively, as defined for their current job position.

2. Very High Radiation Area Key Control

Technical Specification 5.11.2, requires, in part, that areas with radiation intensities greater than 1000 mrem/hr (very high radiation area) be provided with locked doors to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the shift supervisor on duty and/or the plant health physicist.

Contrary to the above, as of February 4, 1988, while locked doors were provided for very high radiation areas, the licensee did not maintain keys for these doors under the administrative control of the shift supervisor on duty and/or the plant health physicist.

3. Failure to Follow Procedures

Technical Specification 5.11 states, in part, that procedures for personnel radiation protection shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure. Procedure RPM 3.1.7.2.b.1 states, in part, that a second person shall always accompany an entry by a qualified health physics technician into a very high radiation area and in all cases the two persons must maintain line-of-sight or other communications while one or both persons remain within the very high radiation area.

Contrary to the above, on February 4, 1988, an NRC inspector observed a health physics technician exit a very high radiation area and not maintain line-of-sight or other communications with a second person within the very high radiation area.

4. Failure to Follow Procedures

Technical Specification 5.8.1 states, in part, that written procedures and administrative policies shall be established, implemented, and maintained that meet or exceed the minimum requirements of Appendix A of USNRC Regulatory Guide 1.33. Procedure HP-9, Section C.1.c.1 of Appendix A states, in part, that controlled surface contaminated areas be conspicuously posted.

Contrary to the above, on February 3 and 4, 1988, an NRC inspector observed a temporary area in room 23 set off as a controlled surface contaminated area that was not conspicuously posted.

5. Respiratory Protection Policy

10 CFR Part 20.103(c)(3) states, in part, that a written policy statement on respirator usage shall be issued covering such things as the use of practicable engineering controls instead of respirators.

Contrary to the above, as of February 5, 1988, the licensee had not issued a written policy statement covering the use of practicable engineering controls instead of respirators.

Collectively, these violations have been categorized as a Severity Level III violation (Supplement IV).

Cumulative Civil Penalty - \$50,000 (assessed equally among the violations).

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 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 penalty 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 amount of the civil penalty proposed above, or the cumulative amount of the civil penalties, if more than one civil penalty is proposed, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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.

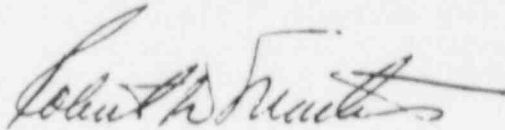
In requesting mitigation of the proposed penalty, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1987), should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, 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.

Notice of Violation

- 4 -

Upon failure to pay any civil penalty due which subsequently have 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 penalty, 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, at the facility which is the subject of this Notice.



Robert D. Martin
Regional Administrator

Dated at Arlington, Texas
This ~~4th~~ day of ~~April~~ 1988

May



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

March 29, 1988

Docket No. 50-311
License No. DPR-75
EA 88-44

Public Service Electric and Gas Company
ATTN: Mr. S. Miltenberger
Vice President and Chief Nuclear Officer
P.O. Box 236
Hancocks Bridge, New Jersey 08038

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT NO. 50-311/87-29)

This refers to the NRC inspection conducted on September 14 - 18 and December 15 - 18, 1987, at Salem, Unit 2, to review your compliance with fire protection requirements, and to determine the status of numerous examples of violations of NRC fire protection requirements identified by your staff and reported to the NRC. During the inspection, the report of which was sent to you on January 26, 1988, other violations of NRC requirements were identified. On February 12, 1988, an enforcement conference was conducted with you and other members of your staff to discuss the violations, their causes and your corrective actions.

The violations are described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice). The violations described in Section I of the Notice involved numerous examples of the failure to satisfy the fire protection requirements set forth in your license and in 10 CFR Part 50, Appendix R, including requirements for the separation of redundant trains of equipment, cabling and associated circuits necessary to achieve and maintain hot shutdown in the event of a fire. At the time the violations were identified, there did not exist an evaluation of these separation deficiencies. For example, the power and control cables for all of the service water pumps were located in the same pipe tunnel without adequate separation or an evaluation of the separation deficiencies. As a result, a fire in this area could have led to a loss of all service water, which, in turn, would lead to disabling of the Diesel Generators needed for safe shutdown. The NRC recognizes that, after identification of this deficiency, your evaluation showed that alternative means were available to compensate for the loss of the service water.

Furthermore, on March 18, 1988, your staff informed the NRC Operations Center that a lack of adequate separation existed for control cables (located in the switchgear room) for the Diesel Generators. Although this issue is not discussed in the enclosed Notice, it appears to represent a further example

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

of the failure to meet fire protection requirements. Following our review of this matter, it may be the subject of further correspondence.

In addition, at the time of the inspection, an analysis had not been completed to ensure that adequate breaker coordination existed between the safe shutdown systems and associated non-safety circuits. Although your subsequent analysis of this issue has not identified a condition where a lack of breaker coordination could result in the loss of all redundant safe shutdown equipment in any one fire area, the failure to complete the analysis and confirm that adequate breaker coordination existed represents a lack of management attention to the fire protection program.

The NRC recognizes that the majority of the violations were identified by your staff during a comprehensive review of the fire protection program initiated in 1986 for the purpose of completely reassessing compliance with Appendix R and with the guidance provided in NRC Generic Letter 86-10, "Implementation of Fire Protection Requirements." Further, the NRC commends such initiatives which have been taken by PSE&G management in the past few years in various functional areas. Nonetheless, the significant number of deficiencies that existed in the fire protection program at Unit 2, as well as the inadequacies in the fire hazards analysis, are particularly disturbing in light of the fact that a meeting was conducted with PSE&G on January 20, 1984 to discuss violations of fire protection requirements at Unit 1 which were identified during an NRC inspection in December 1983 and January 1984. (Reference: NRC Inspection Report No. 50-272/83-37) Although the NRC recognizes that the Notice of Violation was not sent to PSE&G until June 15, 1987, appropriate action should have been initiated by the Company following the earlier 1983-84 inspection to assure compliance with the fire protection requirements at both units.

The NRC attaches great importance to comprehensive licensee programs for detection, correction, and reporting of problems that affect the safety of plant operations. Nonetheless, the NRC requires that systems important to safe shutdown of the reactor be designed and maintained in such a condition that they remain free of damage in the event of a fire, and that NRC regulations be implemented promptly and effectively. Therefore, notwithstanding the commendable initiatives by the current PSE&G management team, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Fifty Thousand Dollars (\$50,000) for the violations described in Section I of the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violations described in Section I of the enclosed Notice have been categorized in the aggregate as Severity Level III problem. The NRC considered mitigation of the base civil penalty amount in this case since the majority of violations were identified by your staff and promptly reported to the NRC as part of the self-initiated corrective action programs targeted at several areas, including fire protection program implementation, in 1986. However, the NRC concludes, on balance, that the civil penalty should not be mitigated in this case because of the multiple examples of

these significant violations and because prior deficiencies had been identified by the NRC at Salem, Unit 1 in 1983 and 1984 and appropriate action should have been taken by the company at that time.

An additional violation, set forth in Section II of the enclosed Notice, has been classified at a Severity Level IV. The violation is based upon an inadequate abnormal operating procedure. The violation was apparently caused by an inadequate review of the procedure prior to issuance.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence, including improving the review of plant procedures. Further, you should provide a description of the condition reported to the NRC on March 18, 1988 regarding the lack of separation of Diesel Generator control cables in the switchgear room, its causes, and your corrective actions. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



William T. Russell
Regional Administrator

Enclosure: Notice of Violation and Proposed Imposition of Civil Penalty

cc w/encl:

Jack Urban, General Manager, Fuels Department, Delmarva Power & Light Co.
J. M. Zupko, Jr., General Manager - Salem Operations
B. A. Preston, Manager, Licensing and Regulation
S. E. Miltenberger, Vice President - Nuclear Operations
M. J. Wetterhahn, Esquire
R. Fryling, Jr., Esquire
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
State of New Jersey

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Public Service Electric
and Gas Company
Salem Generating Station Unit 2

Docket No. 50-311
License No. DPR-75
EA 88-44

During an NRC inspection conducted on September 14 - 18 and December 15 - 18, 1987, NRC inspectors reviewed the circumstances associated with violations of NRC requirements identified by the licensee and reported to the NRC. During the inspection, other 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 penalty are set forth below:

I. Violations Assessed a Civil Penalty

License Condition 2.C.10.a requires, in part, that the licensee install concurrently in Salem Unit 2 all modifications to Salem Unit 1 implemented to comply with the requirements set forth in Sections III.G, III.J, III.L, and III.O of 10 CFR Part 50, Appendix R. Salem Unit 2 modifications were to be completed before September 18, 1987.

- A. 10 CFR Part 50, Appendix R, Section III.G.1 requires that fire protection features shall be provided for structures, systems and components important to safe shutdown. These features shall be capable of limiting fire damage so that one train of systems necessary to achieve and maintain hot shutdown conditions from either the control room or emergency control stations is free of fire damage.

Section III.G.2 requires, in part, that, where cables or equipment, including associated non-safety circuits that could prevent operation or cause maloperation due to induced shorts, of redundant trains of systems necessary to achieve and maintain hot shutdown conditions are located within the same fire area outside of primary containment, a means of maintaining one of the trains free of fire damage shall be provided.

Contrary to the above, as of September 18, 1987, numerous instances existed at Unit 2 where cables and equipment (of redundant trains of systems necessary to achieve hot shutdown) were located within the same fire area outside of primary containment, and a means of maintaining one of the trains free of fire damage was not provided nor was an alternative or dedicated shutdown capability provided. Specific examples of these failures include the following:

1. Control cables for the carbon dioxide fire suppression system for the Emergency Diesel Generator (EDG) room were located in the same fire areas (in the vestibule area to the EDG control room and in the Relay room) without the required separation. A short circuit could cause this system to actuate and inject carbon dioxide in all three EDG rooms, which in turn could (a) cause overheating and thus prevent the operation of the EDGs, and (b) prevent the operators from entering the area to perform required action to bring the EDGs on line. The EDGs are needed to achieve and maintain hot shutdown in that they provide emergency AC power.
 2. Power and control cables for all six service water pumps were located in the same fire area in the Service Water Pipe Tunnel without adequate separation. The operation of at least two of these pumps is needed to supply service water to the EDGs needed to achieve and maintain hot shutdown.
 3. Power feeds from two ("B" and "C") EDGs to the 4160 volt switch-gear were located in the same area in the Fuel Oil Storage Room without adequate separation. Power from at least two out of the three EDGs is needed to achieve and maintain hot shutdown in that they provide the emergency AC power source.
 4. Power cables for both fuel oil transfer pumps ("A" and "B") were located in the same fire area in the carbon dioxide equipment room without adequate separation. The operation of the transfer pumps is needed to achieve and maintain hot shutdown in that they provide fuel oil for the EDGs, which in turn provide the emergency AC power source.
- B. 10 CFR Part 50, Appendix R, Section III.L.7, requires that, for alternative and dedicated shutdown capability, safe shutdown equipment and systems for each fire area shall be known to be isolated from associated non-safety circuits in the fire area so that hot shorts, open circuits, or shorts to ground in the associated circuits will not prevent operation of the safe shutdown equipment.

Contrary to the above, as of September 18, 1967, for alternative and dedicated shutdown capability, the safe shutdown equipment and systems for each fire area were not known to be isolated from associated non-safety circuits in the fire area so that hot shorts, open circuits, or shorts to ground in the associated circuits would not prevent operation of the safe shutdown equipment. Specifically, an adequate analysis had not been performed to verify that adequate breaker coordination existed to ensure that the safe shutdown systems were adequately isolated from the associated non-safety circuits in the fire area.

- C. 10 CFR Part 50, Appendix R, Sections III.L.1 and III.L.3, require that an alternative or dedicated shutdown capability provided for a specific fire area shall be able to achieve and maintain hot standby conditions and that procedures shall be in effect to implement this capability.

Contrary to the above, as of September 18, 1987, adequate procedures were not in effect to ensure that hot standby conditions could be achieved and maintained using an alternate shutdown capability from outside the control room in the event of a fire in the relay room. The procedures were deficient in that they relied on radio communications between operators to perform the shutdown tasks, and these radio communications could be lost in the event of a fire in the relay room because the power source for the radio transmitter is located in that room.

Collectively, these violations have been categorized in the aggregate as a Severity Level III problem (Supplement I).

Cumulative Civil Penalty - \$50,000 (assessed equally among the violations).

II. Violation Not Assessed a Civil Penalty

10 CFR Part 50, Appendix B, Criterion V, requires, in part, that activities affecting quality be prescribed by documented procedures of a type appropriate to the circumstances.

Contrary to the above, as of September 18, 1987, Abnormal Operating Procedure No. AOP-EVAC-2, "Control Room Evacuation Due to Fire in the Control Room or Relay Room," was inadequate in that the Comments/Contingency Actions column of the procedure provided numerous erroneous references to the Fire Hazard Books and Sections. Abnormal Operating Procedure No. AOP-EVAC-2 prescribes a procedure for an activity affecting quality in that the Fire Hazard Books are used to provide detailed explanation to the operators on how to perform the Emergency Equipment Operation.

This is a Severity Level IV violation (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, Public Service Electric and Gas Company (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 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 penalty by letter 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 amount of the civil penalty proposed above, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, and a copy to the NRC Resident Inspector at the Salem Generating Station.

FOR THE NUCLEAR REGULATORY COMMISSION

William T. Russell

William T. Russell
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 29 day of March 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

MAR 08 1988

Docket Nos. 50-338, 50-339
License Nos. NPF-4, NPF-7
EA 87-246

Virginia Electric and Power Company
ATTN: Mr. W. L. Stewart, Vice President,
Nuclear Operations
Post Office Box 26666
Richmond, Virginia 23261

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT NOS. 50-338/87-38 AND 50-339/87-38)

This refers to the Nuclear Regulatory Commission (NRC) inspection conducted by J. Caldwell at North Anna Power Station, Unit 2, on November 20 through December 18, 1987. The inspection included a review of the circumstances surrounding the failure to place inoperable steam flow channels in trip and perform adequate post maintenance testing. The report documenting this inspection was sent to you by letter dated January 15, 1988. As a result of this inspection, significant failures to comply with NRC regulatory requirements were identified, and accordingly, NRC concerns relative to the inspection findings were discussed in an Enforcement Conference held on January 21, 1988. The letter summarizing this Conference was sent to you on February 16, 1988.

The violation described in Section I of the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) involved a failure to place inoperable steam flow channels in trip as required by Technical Specifications (TS). On November 4, 1987, Unit 2 was operated from Mode 3 through Mode 1 up to 25 percent power with an inoperable steam flow channel in both the "A" and "B" steam flow lines. This resulted in the unit operating at low power with inoperable steam flow channels that caused a loss of diversity and redundancy of signals to the Reactor Trip System and Engineered Safety Features Actuation System. A major concern resulting from this violation is that the operations staff knew that the steam flow channels were not responding properly for approximately 10 hours before actually declaring them inoperable. Furthermore, during that period, the operations staff discussed the matter with licensee management, yet the channels were not declared inoperable and appropriate TS actions were not taken until four hours after the unit was placed on line and at power levels greater than 25 percent. Although the specific cause of this violation was personnel error in that untimely operator action resulted in the violation of TS action requirements, a broader issue is the management tolerance that permitted the operators to "live with" indication problems at low steam flow. Your recognition that there is an "operational problem" with management tolerance of nonconforming conditions, which was addressed by your staff during the Enforcement Conference, is important to the process of correcting the misperception of operational standards and ensuring operability decisions are accurate and prompt.

MAR 08 1988

The violation described in Section II.A of the enclosed Notice involved the failure to perform adequate post maintenance testing on a steam flow channel instrument. In this particular case, the leads to the instrument were reversed during maintenance and the problem was not discovered until power operations were resumed. Compounding this problem was the lack of documentation for post-maintenance testing and verification of testing completion.

The violation in Section II.B of the enclosed Notice involved the failure to provide an adequate Licensee Event Report (LER) in that LER 87-015 did not contain available pertinent information regarding the testing and status of the inoperable flow instrument.

Previous concerns related to problems that your operating staff has encountered during other plant startups and outages are documented in Inspection Reports 50-338, 339/87-19 and 87-36, dated September 10, 1987 and January 4, 1988, respectively. During the inspection documented in Inspection Report 50-338, 339/87-19 (June 17 - August 18, 1987), several problems related to the Unit 1 refueling outage and restart were identified. Similar problems were also experienced during the Unit 2 refueling outage and restart and were documented in Inspection Report 50-338, 339/87-36. These problems shared a common thread of inadequate procedures and/or failure to follow procedures. Even though you had a system of identifying problems and mistakes, there needs to be increased management emphasis on promptly establishing and promptly implementing corrective actions. Our concern about the promptness of corrective action was amplified at the Enforcement Conference when your staff explained that the corrective action for the inoperable steam flow channels had not been fully implemented.

The operating staff did not follow standard instructions with regard to declaring the steam flow channels inoperable and that improper interpretation of standards raises a concern about making timely operability decisions when nonconforming conditions occur. Your recognition of this developing issue is noted; however, prompt action is required to ensure that timely decisions are made concerning operability and that corrective actions for identified problems are implemented in a timely manner.

To emphasize the importance of timely operability decisions and properly interpreting operations standards, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of One Hundred Thousand Dollars (\$100,000) for the violations described in Section I of the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violation in Section I of the enclosed Notice has been categorized as a Severity Level III violation. The base civil penalty amount for a Severity Level III violation is \$50,000. The escalation and mitigation factors in the Enforcement Policy were considered, and the base civil penalty amount has been increased by 100 percent for the following reasons: First, prompt and adequate corrective actions were not taken, in that, your operations staff was aware that the steam

Virginia Electric and
Power Company

- 3 -

MAR 08 1983

flow channels were not responding properly for about ten hours before they were declared inoperable. Second, your past performance during other than normal operations such as outages and startups has been less than satisfactory, in that, similar problems have occurred in the past.

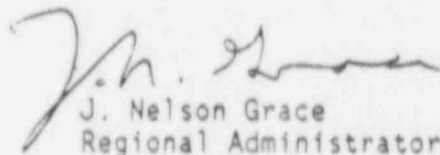
You are required to respond to this letter and the enclosed Notice and should follow the instructions specified therein when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and its enclosure are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,



J. Nelson Grace
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
E. W. Harrell, Station Manager
N. E. Hardwick, Manager - Nuclear
Programs and Licensing

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Virginia Electric and Power Company
North Anna Unit 2

Docket No. 50-339
License No. NPF-7
EA 87-246

During the Nuclear Regulatory Commission (NRC) inspection conducted from November 20 through December 18, 1987 violations of NRC requirements were identified. In accordance with "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 penalty are set forth below:

I. Violation Assessed A Civil Penalty

Technical Specification 3.3.1.1, Table 3.3-1, requires that two Reactor Trip System steam flow channels per loop shall be operable when the Unit is in Modes 1 and 2. When only one channel is operable, startup and power operation may proceed until performance of the next required channel functional test provided the inoperable channel is placed in the tripped condition within one hour.

Technical Specification 3.3.2.1, Table 3.3-3, requires that two Engineered Safety Feature Actuation System steam flow instrumentation channels per steam line shall be operable when the unit is in Modes 1, 2, and 3. When only one channel per steam line is operable, operation may proceed until performance of the next required channel functional test, provided the inoperable channel is placed in the tripped condition within one hour.

Contrary to the above, on November 4, 1987, Unit 2 was operated in Modes 1-3 with an inoperable steam flow channel in both A and B steam flow lines. These steam flow channels, "A" steam generator Steam Flow Channel III (FI-2474) and "B" Steam Flow Channel IV (FI-2485), were identified as indicating zero steam flow with the other four channels indicating positive steam flow. The difference in flow between the two channels indicating no flow and the other channels for the respective loops which were indicating flow was greater than the channel check acceptance criteria thereby, indicating the two channels were inoperable. The channels were not declared inoperable and the appropriate Technical Specification action of placing the inoperable channels in trip within one hour was not taken.

This is a Severity Level III violation (Supplement I). (Applies to Unit 2 only)

(Civil Penalty - \$100,000)

II. Violations not Assessed a Civil Penalty

- A. 10 CFR Part 50, Appendix b, Criterion V, as implemented by the licensee's Quality Assurance Topical Report VEP 1-5A, and ADM-5.0, Instructions, Procedures and Drawings, requires in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, and drawings.

Engineering Work Request (EWR) 87-206 stated that following completion of Raychem splice installation, performance testing of the modified component be accomplished per approved station test procedure.

Contrary to the above, following performance of the Raychem splice installation specified in EWR 87-206, the licensee failed to perform a post-maintenance test to verify the operability of the steam flow instrument, FI-2474.

This is a Severity Level IV violation (Supplement I). (Unit 2 only)

- B. Technical Specification 6.6.1.a requires that the Commission shall be notified and a report submitted pursuant to the requirements of 10 CFR 50.73.

10 CFR 50.73 requires that the licensee report any operation or condition prohibited by the plant's Technical Specifications, and include in the report the cause of each component or system failure or personnel error, the dates and approximate time of occurrences, the method of discovery of each component or system failure, and operator actions that affected the course of the event.

Contrary to the above, Licensee Event Report No. (LER) 87-015, issued by the licensee on December 4, 1987, to describe the violation of Technical Specifications associated with inoperable steam flow instruments FI-2474 and FI-2485 was inadequate for the following reasons:

- (1) LER 87-015 failed to identify that the "B" steam generator Steam Flow Channel IV (FI-2495) had been inoperable since the unit entered Mode 3 and consequently the LER did not identify any cause for the failure or any corrective actions.
- (2) LER 87-015 failed to identify the lack of a proper post maintenance test and testing documentation for "A" steam generator Steam Flow Channel III (FI-2474) following maintenance performed during the refueling outage. The lack of a post maintenance test was not identified as a cause for the steam flow channel being inoperable and in violation of Technical Specifications.

- (3) LER 87-015 failed to identify that the operators violated the Technical Specification 4.3.1.1.1 and 4.3.2.1.1 channel check criteria and the licensee's operation standard concerning channel checks in that the operators logged that both Steam Flow Channels FI-2474 and FI-2485 were outside the licensee's established channel check criteria but did not declare the instruments inoperable and take the actions required by Technical Specification.
- (4) By failing to document specific times of discovery LER 87-015 did not make it clear that the operators had identified problems with Steam Flow Channels FI-2474 and FI-2485 as early as 10 hours prior to declaring them inoperable. The LER also did not state that the unit operated at approximately 25 percent reactor power for approximately four hours with both Steam Flow Channels FI-2474 and FI-2485 indicating zero steam flow (e.g., failed low) before declaring the channels inoperable and taking the required Technical Specification actions.
- (5) LER 87-015 did not state that the condition with inadequate steam flow indication at low steam flow and the action taken by the operators which was in violation of Technical Specification channel check surveillance criteria was known and condoned by licensee management, nor was this listed as a cause and discussed under corrective action.

This is a Severity Level IV violation (Supplement I). (Unit 2 only)

Pursuant to the provisions of 10 CFR 2.201, Virginia Electric and Power Company (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 violation:

(1) admission or denial of the 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 which 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 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 penalty 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 amount of the civil penalty proposed above, or may protest imposition of

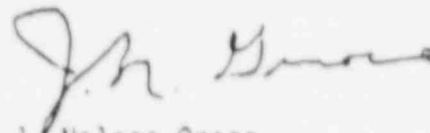
the civil penalty in whole or in part by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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 the penalty due, which has been subsequently 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 penalty, 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, DC 20555, with a copy to the Regional Administrator, Region II and a copy to the NRC Resident Inspector, North Anna Power Station.

FOR THE NUCLEAR REGULATORY COMMISSION



J. Nelson Grace
Regional Administrator

Dated at Atlanta, Georgia
this 8th day of March 1988

I.B. REACTOR LICENSEES, SEVERITY LEVEL III VIOLATION,
NO CIVIL PENALTY



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

JUN 13 1988

Docket Nos. 50-413, 50-414
License Nos. NPF-35, NPF-52
EA 88-96

Duke Power Company
ATTN: Mr. H. B. Tucker, Vice President
Nuclear Production Department
422 South Church Street
Charlotte, North Carolina 28242

Gentlemen:

SUBJECT: NOTICE OF VIOLATION
(NRC INSPECTION REPORT NOS. 50-413/88-14 AND 50-414/88-14)

This refers to the Nuclear Regulatory Commission (NRC) inspection conducted by an Augmented Inspection Team at the Catawba Nuclear Station on March 10-18, 1988. The inspection included a review of the circumstances associated with the March 9, 1988 Reactor Trip and resultant swapover of suction by an Auxiliary Feedwater Pump to the Nuclear Service Water System and subsequent degraded auxiliary feedwater flow. The report documenting this inspection was sent to you by letter dated April 20, 1988. As a result of this inspection, a significant failure to comply with NRC regulatory requirements was identified, and accordingly, NRC concerns relative to the inspection findings were discussed in an Enforcement Conference held on April 29, 1988. The letter summarizing this conference was sent to you on May 13, 1988.

The violations described in the enclosed Notice of Violation (Notice) was caused by an inadequate facility test program process which permitted the Auxiliary Feedwater System to be placed in service, and under certain conditions, to be degraded and unable to meet Technical Specification requirements for flow path operability. As a result, the units operated without an assured source of water because the facility test program did not include an adequate method of assuring an adequate supply of water to the Auxiliary Feedwater System. On March 9, 1988, the Auxiliary Feedwater System was initiated and was only able to provide reduced flow to the steam generators because of Asiatic clam shell blockage in the Nuclear Service Water System. If the March 9, 1988 auxiliary feedwater initiation event had not occurred, your facility test program would likely not have discovered the growth of Asiatic clams in the Nuclear Service Water System, and had the Auxiliary Feedwater System been called upon to function, the consequences of Asiatic clam infestation and clam shell blockage could have been more severe. This example and the results of your further testing on other service water supplied backup systems emphasize the need for a complete and thorough facility test program to demonstrate that all systems will perform satisfactorily.

In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988) (Enforcement Policy), the violation described in the enclosed Notice has been categorized as a Severity Level III problem. A civil penalty is considered for a Severity

JUN 13 1988

Level III violation or problem. However, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, I have decided that a civil penalty will not be proposed in this case because (1) your corrective action to prevent recurrence were extensive, including your actions to comply with the appropriate Technical Specifications including shutdown of Unit 1 and extensive investigations of similar systems at other plants; and (2) your past performance in this area has been good, considering your initiation of an extensive ongoing program to remedy heat exchanger testing and operability issues that had been identified at another site, and the extensiveness of your testing program for active components associated with raw cooling service water.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and its enclosure are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



J. Nelson Grace
Regional Administrator

Enclosure:
Notice of Violation

cc w/encl:
T. B. Owen, Station Manager
Senior Resident Inspector - McGuire

NOTICE OF VIOLATION

Duke Power Company
Catawba Nuclear Station
Units 1 and 2

Docket Nos. 50-413, 50-414
License Nos. NPF-35, NPF-52
EA 88-96

During an Nuclear Regulatory Commission (NRC) inspection conducted on March 10-18, 1988, violations of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988), the violations are listed below:

- A. 10 CFR Part 50, Appendix B, Criterion XI, requires that a test program be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written tests procedures which incorporate the requirements and acceptance limits contained in applicable design documents. The test program shall include, as appropriate, proof tests prior to installation, pre-operational tests, and operational tests during nuclear power plant operation, of structures, systems, and components. Test results shall be documented and evaluated to assure that test requirements have been satisfied.

Contrary to the above, as of March 9, 1988, the test program implemented by the licensee to assure the operability of the auxiliary feedwater system (AFS) was inadequate in that it did not provide an adequate method to detect the growth of asiatic clams in the inactive portions of the nuclear service water system and, as such, did not detect the growth of such clams, which resulted in the clogging of AFS Train 'A' discharge control valves 2CA-56 and 2CA-60 with clam shells after the motor-driven AFS pump 2A suction realigned to the nuclear service water assured source.

- B. Catawba Nuclear Station Technical Specification 3.7.1.2 requires that three independent steam generator auxiliary feedwater pumps and associated flow paths be operable with:
- Two motor-driven auxiliary feedwater pumps, each capable of being powered from separate emergency busses, and
 - One steam turbine-driven auxiliary feedwater pump capable of being powered from an operable steam supply system when the unit is in modes 1, 2, or 3.

With one auxiliary feedwater pump inoperable, it is required to be restored to operable status within 72 hours or the unit be in at least hot standby within the next six hours and in hot shutdown within the following six hours.

Contrary to the above, on March 9, 1988, with Unit 2 in mode 1 and operating at 20 percent power, three independent steam generator auxiliary feedwater pumps and associated flow paths were not operable during an actual turbine trip/feedwater isolation transient and resulting auxiliary feedwater system (CA) initiation.

This is a Severity Level III problem (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, Duke Power Company is hereby required to submit a written statement or explanation to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector, Catawba Nuclear Station, within 30 days of the date of the letter transmitting this Notice. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) admission or denial of the violation, (2) the reason for the violation if admitted, (3) the corrective steps which have been taken and the results achieved, (4) the corrective steps which will be taken to avoid further violations, and (5) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time. 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 taken.

FOR THE NUCLEAR REGULATORY COMMISSION



J. Nelson Grace
Regional Administrator

Dated at Atlanta, Georgia
this 13th day of June 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

April 28, 1988

Docket No. 50-334
License No. DPR-66
EA 88-83

Duquesne Light Company
ATTN: Mr. J. D. Sieber
Vice President
Nuclear Group
Post Office Box 4
Shippingport, Pennsylvania 15077

Gentlemen:

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report No. 50-334/88-12)

This refers to the NRC special safety inspection conducted on March 3-8, 1988 at the Beaver Valley Power Station, Unit 1, to review the circumstances associated with a violation of a technical specification limiting condition for operation which was identified by your staff and reported to the NRC. The inspection report was sent to you on March 10, 1988. During the inspection, a failure to meet a commitment made in the Final Safety Analysis Report (FSAR) was also identified. On March 24, 1988, an enforcement conference was conducted with Mr. J. Sieber and other members of your staff to discuss the violation and deviation, their causes, and your corrective actions.

The violation, which is described in the enclosed Notice, involved the inoperability (for approximately eight days while the reactor was in either the hot shutdown, startup or operations mode) of two of four channels used to actuate the Containment Spray Systems and Phase B Containment Isolation whenever high containment pressure setpoints were exceeded. The channels were inoperable in that their associated bistables were in the bypassed position, and therefore, not capable of performing the intended automatic safety function. The bistables were left in this condition after completion of maintenance surveillance tests performed on February 22, 1988. As a result, although the safety function remained available throughout the period since the other two channels were operable, the "built-in" redundancy for automatic actuation of these systems was lost. At the time the tests were performed, the reactor was in the cold shutdown mode and being prepared for startup.

The procedure used to perform the maintenance surveillance test specified that if the reactor was in the cold shutdown or refueling modes, the bistables were to be returned to the bypassed position upon completion of the test. Apparently, it was envisioned that the startup checklist performed prior to entering the hot shutdown condition would identify this bypassed condition and return the bistables to the proper position prior to startup. However, the startup checklist had been performed approximately six hours prior to the performance

of the maintenance surveillance test for those two channels. As a result, the bistables were not placed in the bypassed position until after the start-up checklist had been completed.

The NRC notes that a similar maintenance surveillance test on the other two channels had been performed just prior to performance of the startup checklist, and those channels were left in the bypassed position, in accordance with the procedure, upon completion of the test. However, those two channels were returned to the normal position when identified during the performance of that startup checklist. If the checklist had been performed but a few hours earlier, all four bistables could have been left in the bypassed position, which would have rendered all four channels inoperable.

The NRC is concerned that the specific maintenance surveillance test procedure, although requiring that the operations department be notified when the surveillance was completed, did not require that the operations department be informed that the equipment was left, at the completion of the test, in a configuration other than existed at the beginning of the surveillance. If the operations department had been notified of this condition, additional checks could have been performed at that time to ensure restoration of the bistable to the normal position prior to entering the hot shutdown mode. Furthermore, when these channels were in the bypassed position, there was no indication in the control room of this condition, contrary to a commitment in the FSAR. Apparently, although there was control room indication at the time the commitment was made in the FSAR, this indication capability was lost during a modification made at the facility in 1980. A change to the FSAR was never made. The failure to satisfy this commitment, which is described in the associated inspection report, is also of concern since the violation could have been prevented if control room indications existed.

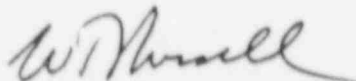
In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987), the violation described in the enclosed Notice has been classified at Severity Level III. A civil penalty is considered for a Severity Level III violation. However, after consultation with the Director, Office of Enforcement and the Deputy Executive Director for Regional Operations, I have decided that a civil penalty will not be proposed in this case because (1) the violation was identified by your staff and promptly reported to the NRC, and (2) your "root cause" analysis of this event was very thorough, and corrective actions taken subsequent to that analysis were unusually prompt and extensive. By this action, the NRC does not minimize the significance of the violation. Rather, your actions in response to the violation and described in the enforcement conference demonstrate that you recognize the significance of this violation. It is clearly not acceptable to operate in a condition where the loss of one additional channel could defeat initiation of containment spray and automatic containment isolation. The NRC emphasizes that any similar violations in the future will result in additional enforcement actions.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notices when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. In addition, you should describe the actions taken or planned to assure that FSAR commitments are met, or if changed, are changed in accordance with the requirements of 10 CFR 50.59 and 50.71. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL No. 96-511.

Sincerely,


William T. Russell
Regional Administrator

Enclosure:
Notice of Violation

cc w/encl:

J. J. Carey, Executive Vice President, Operations
J. O. Crockett, General Manager, Corporate Nuclear Services
W. S. Lacey, General Manager, Nuclear Operations
N. R. Tonet, Manager, Nuclear Engineering
T. P. Noonan, Plant Manager
C. E. Ewing, QA Manager
K. D. Grada, Manager, Nuclear Safety
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
Commonwealth of Pennsylvania

NOTICE OF VIOLATION

Duquesne Light Company
Beaver Valley Power Station, Unit 1

Docket No. 50-334
License No. DPR-66
EA 88-83

During an NRC inspection conducted on March 3-8, 1988, NRC inspectors reviewed the circumstances associated with a violation identified by the licensee and reported to the NRC. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987), the violation is set forth below:

Technical Specification Limiting Condition for Operation 3.3.2.1 requires, in part, that whenever the reactor is in the power operation, startup, or hot shutdown modes, the engineered safety feature actuation system instrumentation channels shown in Table 3.3-3 shall be operable. Table 3.3-3 specifies that a minimum of three of the four containment pressure High-High channels shall be operable for automatic actuation of the containment spray systems (CSS) and phase "B" containment isolation (CIB).

Technical Specification LCO Action Statement 3.3.2.1.b specifies that when the number of operable channels is one less than the total number of channels (4), the licensee shall demonstrate that the required number of minimum channels operable (3) is met within 1 hour. Operation may continue with the inoperable channel bypassed and one additional channel may be bypassed for up to two hours for testing in accordance with Technical Specification Surveillance Requirement 4.3.2.1.

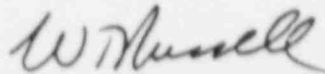
Contrary to the above, between about 7:30 a.m. on February 24, 1988 and about 6:30 a.m. on March 3, 1988, while the reactor was at various times in the hot shutdown, startup or power operation modes, the required minimum number of operable high-high containment pressure channels (3) was not maintained in that two of the four channels for CSS actuation and CIB isolation were inoperable because their associated bistables were in the bypassed position.

This is a Severity Level III violation (Supplement I)

Pursuant to the provisions of 10 CFR 2.201, Duquesne Light Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector, within 30 days of the date of the letter transmitting this 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 if admitted, (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. 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 taken. Consideration may be given to extending the response time for good cause shown.

FOR THE NUCLEAR REGULATORY COMMISSION



William T. Russell
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 28 day of April 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

JUN 29 1988

Docket No. 50-389
License No. NPF-16
EA 88-117

Florida Power and Light Company
ATTN: Mr. W. F. Conway
Senior Vice President - Nuclear
Post Office Box 14000
Juno Beach, Florida 33408-0420

Gentlemen:

SUBJECT: NOTICE OF VIOLATION
(NRC INSPECTION REPORT NO. 50-389/88-06)

This refers to the Nuclear Regulatory Commission (NRC) inspection conducted at the St. Lucie facility on March 5 to April 9, 1988. The inspection included a review of the circumstances associated with the March 13 to April 6, 1988, blocking of the safety injection actuation and containment isolation signals to the letdown isolation valve. The report documenting this inspection was sent to you by letter dated May 18, 1988. As a result of this inspection, a significant failure to comply with NRC regulatory requirements was identified, and accordingly, NRC concerns relating to the inspection findings were discussed in an Enforcement Conference held on May 26, 1988.

The violation described in the enclosed Notice of Violation (Notice) involved the improper positioning of a switch which caused the bypassing of letdown isolation actuation and safety injection actuation signals to a containment isolation valve, which would have precluded its automatic closure. This was caused by control room personnel inappropriately relying on piping and instrumentation drawings (P&ID) and performing only cursory reviews of control wiring diagrams (CWD) to reach technical conclusions pertaining to electrical control circuits. Further, control room personnel demonstrated a lack of understanding of the functions of a "normal/isolate switch" on an electrical circuit panel in the cable spreading room, normally designated to be used only under abnormal conditions associated with remote shutdown capabilities, which is indicative of the need for enhanced training in the use of P&IDs and CWDs by plant operators. In this case, the switch was used as an electrical jumper without detailed review as to the possible technical implications of this action on plant operations. Finally, there is the concern that this problem remained undetected through the rotation of five control room shifts over a 24-day period.

In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988), the violation described in the enclosed Notice has been classified as a Severity Level III violation. Normally, a civil penalty is considered for a Severity Level III violation. However, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, I have decided that a civil

JUN 29 1988

penalty will not be proposed in this case because corrective actions to prevent recurrence were prompt and extensive; your past performance in this area has been good; and we wish to encourage the continued inquiring attitudes by your operators, such as that demonstrated by the Reactor Operator trainee who discovered and pursued this problem.

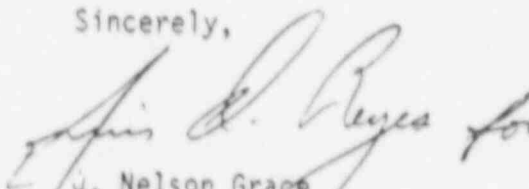
You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and its enclosure are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,



J. Nelson Grace
Regional Administrator

Enclosure:
Notice of Violation

cc w/encl:
K. N. Harris, Vice President
St. Lucie Nuclear Plant
G. J. Boissy, Plant Manager
J. B. Harper, Site QA Superintendent

NOTICE OF VIOLATION

Florida Power and Light Company
St. Lucie Unit 2

Docket No. 50-389
License No. NPF-16
EA 88-117

During the Nuclear Regulatory Commission (NRC) inspection conducted on March 5 to April 9, 1988, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988), the violation is listed below:

Unit 2 Technical Specification (TS) 3.6.3 requires that containment isolation valves specified in Table 3.6-2 shall be operable in modes 1 through 4 or various actions be taken within 4 to 36 hours to correct the situation or place the unit in cold shutdown.

Contrary to the above, valve I-HCV-2516, a containment isolation valve in the Chemical Volume and Control System (CVCS) letdown line, listed in TS Table 3.6-2, was inoperable in excess of the time limits specified by the TS without the required action being taken. Specifically, on March 13, 1988, with the plant operating in Mode 1 at 100 percent power valve I-HCV-2516 was electrically "jumped open" and effectively rendered inoperable by positioning its "normal/isolate" switch to the "isolate" position. This action bypassed the containment isolation actuation (CIA) and safety injection actuation (SIA) signals to that valve. This discrepancy existed until April 6, 1988, when the condition was discovered and the "normal/isolation" switch returned to the "normal" position.

This is a Severity Level III violation (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, Florida Power and Light Company (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 of this Notice. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) admission or denial of the violation, (2) the reason for the violation if admitted, (3) the corrective steps which have been taken and the results achieved, (4) the corrective steps which 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 taken. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

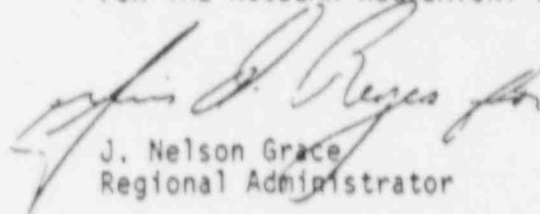
The responses to the Director, Office of Enforcement, noted above (Reply to a Notice of Violation) should be addressed to: Director, Office of Enforcement,

Notice of Violation

- 2 -

U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy of the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II, and a copy to the NRC Resident Inspector, St. Lucie facility.

FOR THE NUCLEAR REGULATORY COMMISSION



J. Nelson Grace
Regional Administrator

Dated at Atlanta, Georgia
this 29th day of June 1988

I.C. NON-LICENSED VENDOR (PART 21)
NO CIVIL PENALTY



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Docket No. 99900871/88-01
EA 88-129

June 3, 1988

Mr. P. A. Zecos, President
and Chief Executive Officer
Elgar Corporation
9250 Brown Deer Road
San Diego, California 92121

Dear Mr. Zecos:

This refers to the inspection conducted by Mr. J. J. Petrosino of this office on January 25-28, 1988, of your facility at San Diego, California and to the discussions of our findings with Mr. T. Erickson and members of your staff at the conclusion of the inspection.

This inspection was made as a result of the recurring problems experienced with Elgar 25KVA electrical inverters by the Palo Verde Nuclear Generating Station (PVNGS) units II and III. The scope of the inspection was limited to a review of your 7.5 and 25KVA electrical inverter design changes. Areas examined during the inspection and our findings are discussed in the enclosed report. Within these areas, the inspection consisted of an examination of procedures and representative records, interviews with personnel, and observations by the inspector.

During the inspection, it was found that the implementation of your QA program failed to meet certain NRC requirements. The most serious of these findings was the failure of Elgar to evaluate potentially reportable 10 CFR Part 21 deviations and design errors, or to notify its end users so they could cause an evaluation to be performed. Additionally, Elgar is not appropriately controlling its hardware design changes for its 7.5 and 25KVA electrical inverters. A review of Elgar design change documents revealed numerous examples where an independent review for technical adequacy was not performed. Furthermore, based on our review of your 7.5 and 25KVA inverters, it appears that technical reviews to assess the collective impact of several design changes on a particular system function were not performed. The specific findings and references to the pertinent requirements are identified in the enclosures to this letter.

In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2 Appendix C (1988), the violation described in the enclosed Notice has been classified at a Severity Level III violation because silicone control rectifiers failed in actual use and if an evaluation of a deficiency known to Elgar had been performed it is likely a Part 21 report would have been required. However, pursuant to 10 CFR 21.61, the failure to perform the evaluation did not appear to be the result of a knowing and conscious failure to provide the required notice and so a civil penalty is not being imposed. Also enclosed is a Notice of Nonconformance which describes apparent weakness in your program for compliance with 10 CFR Part 50, Appendix B.

Mr. P. A. Zecos

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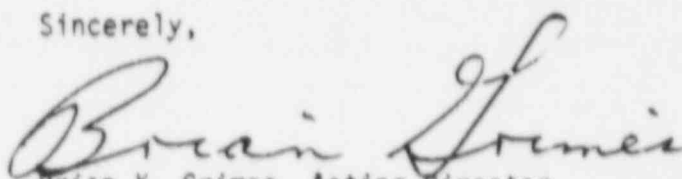
June 3, 1988

The responses requested by this letter are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection reports will be placed in the NRC's Public Document Room.

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,



Brian K. Grimes, Acting Director
Division of Reactor Inspection and Safeguards
Office of Nuclear Reactor Regulation

Enclosures:

1. Appendix A-Notice of Violation
2. Appendix B-Notice of Nonconformance
3. Appendix C-Inspection Report No. 99900871/88-01

cc w/enclosures:
See next page

APPENDIX A

Elgar Corporation
Docket No. 99900871/88-01

EA 88-129

NOTICE OF VIOLATION

During an inspection conducted on January 25-28, 1988, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988) the violation is listed below:

10 CFR 21.21(a)(1), requires, in part, that each corporation subject to 10 CFR Part 21 adopt appropriate procedures to provide for either evaluating deviations or informing the customer of the deviation in order that the customer may cause the deviation to be evaluated.

Contrary to above, two instances were revealed where Elgar had knowledge of deviations, omissions, and/or design errors and neither performed an evaluation of them for potential reportability or informed the licensees so they could evaluate them for reportability. Examples are as follows:

- a. During the review, it was revealed that failures of silicon controlled rectifiers were known to have occurred in actual use and that the Elgar maintenance instructions for its 25KVA inverters do not contain a critical torque requirement necessary for the installation of replacement silicon controlled rectifiers (SCR). If a replacement SCR is installed without receiving the appropriate torque, premature failure is likely to occur.
- b. During the review of Elgar's 7.5 and 25KVA inverter design changes, it was revealed that a number of engineering change notices (ECNs) identified the reason for change as design errors or deviations. However, it was identified that Elgar had not considered the effect of these errors or deviations on other similar units in current operation at an end user facility or for generic applicability, and Elgar had not notified the end user of the errors or deviations. The following ECNs were determined to be in this category:
 - ECN6379, PWM Analog Logic Board, 4/1/87 - Dwg. 643-102-41, Rev. J.
 - ECN1499, Alarm Logic Board, 12/30/80 - Dwg. 643-103-42, Rev. H.
 - ECN4530, Alarm Logic Board, 2/14/83 - Dwg. 549-000-2, Rev. P.
 - ECN5589, Static Switch Logic, 8/30/85 - Dwg. 549-000-2, Rev. P.
 - ECN6539, Inverter Filter Assembly, 12/14/87 - Dwg. 642-211-43, Rev. J.
 - ECN3530, Alarm Logic Board, 2/14/83 - Dwg. 643-103-42, Rev. H.

This is a Severity Level III Violation (Supplement VII).

Pursuant to the provisions of 10 CFR 2.201, Elgar Corporation is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 within 30 days of the date of the letter transmitting this Notice. The reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) the reason for the violation if admitted, (2) the corrective steps that have been taken and results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

APPENDIX B

Elgar Corporation
Docket No. 99900871/88-01

EA 88-129

NOTICE OF NONCONFORMANCE

During an inspection conducted January 25-28, 1988, the implementation of the quality assurance (QA) program at the Elgar Corporation (Elgar) facilities in San Diego, California was reviewed. The results of the inspection revealed that certain of its activities were not conducted in accordance with NRC requirements. These items are set forth below and have been classified as nonconformances with the requirements of Appendix B to 10 CFR Part 50.

1. Criterion I, "Organization," of Appendix B to 10 CFR Part 50 requires, in part, that the authority and duties of persons and organizations performing activities affecting the safety-related functions of structures, systems, and components be clearly established and delineated in writing. These activities include both the performing functions of attaining quality and the quality assurance functions.

Contrary to the above criteria, Elgar has failed to clearly establish the duties and authorities of its engineering personnel to ensure its safety-related design and engineering activities are satisfactorily accomplished. Examples of this failure were revealed during the inspection of Elgar internal documents concerning engineering and design activities listed below.

- Part 5.0, "Design," of Section 04 of Elgar's QAM
- Section 17, "QA Seconds," of Elgar's QAM
- Procedure EEP-1, "Engineering Release and Change"
- Procedure EEP-3, "Engineering Change Requests"
- Procedure EEP-20, "Engineering Design Review"
- Procedure 56007-01, "Flow Diagram" [design changes]
- Procedure 60002-01, "Change Notices" [design change notices]
- Procedure 60003-01, "Change Control Board"

2. Criterion III, "Design Control," of Appendix B to 10 CFR Part 50 requires, in part, that measures be established for the control of design interfaces and for coordination among participating design organizations. The design control measures shall provide for verifying or checking the adequacy of design, such as by the performance of design reviews. The verifying or checking process shall be performed by individuals other than those who performed the original design. Design control measures shall be applied to items such as compatibility of materials, maintenance, repair, and delineation of acceptance criteria for inspection and tests. Design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design.

Part 5.0, "Design Control" Section of Elgar's QA manual (QAM) in part implement 10 CFR Part 50, Appendix B, Criterion III and requires, in part, that Elgar engineering review technical requirements, descriptions, and documentation, and approve or take exception to each of the items they review. Additionally, Elgar engineering is required to maintain drawing and design control by following the prescribed steps in the "Document Control" section of its QAM.

Part 7.0, "Document Control" section of Elgar's QAM requires, in part, that Elgar engineering: (a) assure that drawings, specifications and procedures conform to applicable standards and codes, (b) assure that obsolete drawing masters be marked accordingly, removed from active files, and filed in the obsolete file, (c) maintain a current status log for drawings, and (d) provide assurance that drawings and change controls are maintained in accordance with the procedure.

Contrary to the above, the inspection revealed that:

- a. Elgar has failed to assure that its design control measures provide for an independent verification of the technical adequacy of its design changes for at least its 7.5 and 25KVA inverters. The inspection of Elgar engineering design changes (ECN) revealed that the following 12 (out of a total of 55) ECNs were prepared, reviewed, and approved by the same person:

-ECN 1104, -ECN 1397, -ECN 1473, -ECN 1493, -ECN 1499, -ECN 1687,
-ECN 1796, -ECN 1836, -ECN 2212 -ECN 3800, -ECN 5988, -ECN 6216;

- b. Elgar has failed to assure that the cumulative affect of multiple design changes on an individual drawing does not negatively affect the functioning of the safety-related system or component in regard to the original design. A review of the 55 aforementioned ECNs revealed that no design function reviews are performed by Elgar to assess the possible affects of the collective design changes; and
- c. Elgar could not provide previous revisions of drawings to the NRC inspector for any of the nine inverter component drawings that were being reviewed to determine if cumulative changes had been addressed. These drawings include:

-643-209-42, -643-101-42, -643-102-41, -642-107-40, -643-103-42,
-642-211-43, -549-000-2, -543-118-1, -549-000-9.

3. Criterion XVIII, "Audits," of Appendix B to 10 CFR Part 50, requires, in part, that a comprehensive system of planned and periodic audits be carried out to verify compliance with all aspects of the QA program and

to determine the effectiveness of the program. The audits will be performed by trained personnel not having direct responsibilities in the areas being audited. Audit results shall be documented and reviewed by management having responsibility in the area audited.

Contrary to the above, it was noted that the last two internal QA department audits dated July 1987 and September 1987, respectively, used QA personnel to perform the audits. The QA Manager was the audit team leader on one of the two audits.

Please provide to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 in writing within 30 days of the date of this Notice, the reason for the nonconformances, the corrective steps which have been taken and the results achieved, the corrective steps which will be taken to avoid further nonconformances, and the date when your corrective action will be completed. Where good cause is shown, consideration will be given to extending the response time.

II.A. MATERIALS LICENSEES, CIVIL PENALTIES AND ORDERS



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
789 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60127

JUN 30 1987

Docket No. 030-12910
License No. 24-17529-01
EA 87-84

Aztec Laboratories
ATTN: Merrill Nissen
Post Office Box 31044
Kansas City, MO 64129

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION ON CIVIL PENALTY
(NRC INSPECTION REPORT NO. 030-12910/87001(DRSS))

This refers to the routine safety inspection conducted during the period March 25 through May 15, 1987 at your Arlington Street facility. That inspection identified that you had not properly assessed the radiological hazards associated with a fire that occurred at your facility in 1984 and the event was not reported to the NRC. A Confirmatory Action Letter was issued on April 10, 1987, confirming implementation schedules for adequate cleanup and resolution of these issues. The inspection results were the subject of an enforcement conference call on May 26, 1987 between you and Mr. J. A. Hind and others of the NRC Region III staff. A copy of the inspection report was sent to you by letter dated May 19, 1987.

As a result of the inspection, it appears that a number of violations of NRC requirements have occurred. These include (1) failure to make surveys as are reasonable under the circumstances to evaluate the extent of radiation hazards that were present after the fire, (2) failure to report an event involving licensed material that caused damage to property in excess of \$2,000.00, (3) failure to secure licensed materials in an unrestricted area from unauthorized removal, (4) failure to test for leakage and/or contamination at intervals not to exceed six months, (5) failure to maintain records of inventories as required, and (6) failure to use licensed materials only at authorized locations. The root cause of these violations appears to be your failure to fully understand NRC requirements. These violations are described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty. Although all of the violations demonstrate that there are serious weaknesses in the oversight and control of the radiation safety program at your facility, violations I.A and I.B relating to the March 1984 event are considered particularly significant.

To emphasize the need for stricter controls over your radiation safety program and to notify the NRC of significant events which may impact the public health and safety, I have been authorized, after consultation with the Director, Office

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JUN 30 1987

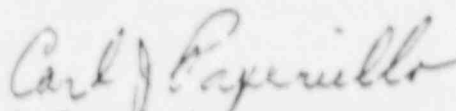
of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Five Hundred Dollars (\$500) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violations described in Section I of the enclosed Notice have been categorized at a Severity Level III. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustment has been deemed appropriate.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements. In this regard, we plan to increase the frequency of NRC inspections. If future inspections indicate that you as a licensee are unable or unwilling to comply with NRC requirements, future enforcement action will be considered, including suspension or revocation of your license.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



for
A. Bert Davis
Regional Administrator

Enclosure: Notice of Violation
and Proposed Imposition of
Civil Penalty

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Aztec Laboratories
Kansas City, MO 64129

Docket No. 030-12910
License No. 24-17529-01
EA 87-84

An NRC inspection conducted during the period March 25 through May 15, 1987 identified violations of NRC requirements. 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 penalty are set forth below:

I. Violations Assessed a Civil Penalty

- A. 10 CFR 20.403(b)(4) requires each licensee to, within 24 hours of discovery of the event, report any event involving licensed material possessed by the licensee that may have caused or threatens to cause damage to property in excess of \$2,000.00.

Contrary to the above, from March 1984 until the date of inspection, the licensee failed to notify the NRC of a March 1984 fire which involved a gas chromatograph unit containing a nominal 14.5 millicuries of nickel-63, and which caused in excess of \$40,000 damage to both the facility and licensed material. Further decontamination costs including consultant fees, decontamination, and waste disposal exceeded \$2,000.

- B. 10 CFR 20.201(b) requires each licensee to make or cause to be made such surveys as are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As defined by 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials. When appropriate, such evaluation includes a physical survey of the location of materials and equipment, and measurements of levels of radiation or concentrations of radioactive material present.

Contrary to the above, from March 1984 until the date of the inspection, the licensee failed to make a reasonable survey to evaluate the extent of radiation hazards present as a result of the March 1984 fire. Although a visual check of the source holder was made after the fire, radiation surveys and wipe tests for leakage were not performed. As a result between March 1984 and March 26, 1987, leakage from the nickel-63 source went undetected.

This is a Severity Level III problem (Supplement IV).

Cumulative Civil Penalty - \$500 (assessed equally between the violations).

II. Violations Not Assessed a Civil Penalty

- A. 10 CFR 20.207(a) states that licensed materials stored in an unrestricted area shall be secured from unauthorized removal from the place of storage.

Contrary to the above, from March 1984 until the date of inspection, a nickel-63 source containing 14.5 millicuries was stored at the licensee's Arlington Street facility and was not secured from unauthorized removal.

This is a Severity Level IV violation (Supplement IV).

- B. License Condition No. 17 requires each chromatograph detector cell containing nickel-63 to be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, a detector cell received from another person shall not be put into use until tested.

Contrary to the above, each chromatograph detector cell containing nickel-63 had not been tested for leakage and/or contamination every six (6) months as required. Specifically, as of the day of this inspection, one detector cell at the Arlington facility had not been tested for leakage since at least September 1982 and two detector cells, located at the Stadium Drive facility, had not been tested since at least February 1986. Furthermore, the two detector cells at the Stadium Drive facility were received in February 1986 in the absence of a certificate from the transferor indicating that a test had been made within six (6) months prior to transfer and one detector was put into use.

This is a Severity Level IV violation (Supplement VI).

- C. License Condition No. 18 requires the licensee to conduct a physical inventory every six (6) months to account for all foils received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, location of foils, and the date of the inventory.

Contrary to the above, as of the date of inspection, records of inventories have not been maintained as required since September 1982.

This is a Severity Level V violation (Supplement VI).

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- D. License Condition No. 10 states licensed material shall be used only at the licensee's facilities located at 3933 Arlington Street, Kansas City, Missouri.

Contrary to the above, in February 1986, two detector cells containing licensed material were received at a facility not authorized by this license where one detector cell was placed in storage and one detector cell was put into use.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Aztec Laboratories (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 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 penalty by letter 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 amount of the civil penalty proposed above, or the cumulative amount of civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty 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 penalty will be issued. Should the licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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 such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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

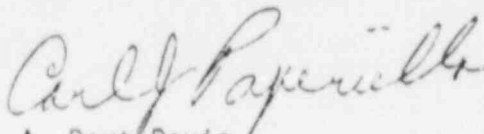
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page and paragraph numbers) to avoid repetition. The attention of the licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137.

FOR THE NUCLEAR REGULATORY COMMISSION


for A. Bert Davis
Regional Administrator

Dated at Glen Ellyn, Illinois
this 30 day of June 1987



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 28 1987

Docket No. 030-12910
License No. 24-17529-01
EA 87-84

Aztec Laboratories
ATTN: Merrill Nissen
Post Office Box 31044
Kansas City, MO 64129

Gentlemen:

SUBJECT: ORDER IMPOSING A CIVIL MONETARY PENALTY

This refers to your letters dated July 21, 1987, in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you by our letter dated June 30, 1987. Our letter and Notice described six violations of NRC requirements, two of which were categorized collectively as a Severity Level III problem. The violations were identified during an NRC inspection conducted March 25 through May 15, 1987 at your Arlington Street facility.

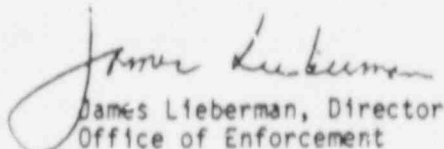
To emphasize the need for stricter controls over your radiation safety program and to notify the NRC of significant events which may impact the public health and safety, a civil penalty of Five Hundred Dollars (\$500) was proposed.

In your responses you admitted four violations occurred as described in the Notice, denied two violations and offered several reasons for full mitigation of the civil penalty.

After consideration of your responses, we have concluded, for the reasons given in the Appendix attached to the enclosed Order Imposing Civil Penalty, that the violations did occur as originally stated in the Notice. Accordingly, we hereby serve the enclosed Order on Aztec Laboratories imposing a civil monetary penalty in the amount of Five Hundred Dollars (\$500). We will review the effectiveness of your corrective actions during a subsequent inspection.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room.

Sincerely,


James Lieberman, Director
Office of Enforcement

Enclosures: As Stated

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of)

Aztec Laboratories)
Post Office Box 31044)
Kansas City, MO 64129)

Docket No. 030-12910
Licensee No. 24-17529-01
EA 87-84

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Aztec Laboratories is the holder of Byproduct Materials License No. 24-17529-01 issued by the Nuclear Regulatory Commission (Commission or NRC) on June 22, 1977. The license authorizes the licensee to possess and use nickel-63 gas chromatographs for sample analysis in accordance with the conditions specified therein.

II

An inspection of the licensee's activities was conducted during the period March 25 through May 15, 1987. The results of this inspection indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was served upon the licensee by letter dated June 30, 1987. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the Licensee had violated, and the amount of the civil penalty proposed for the violations. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalty by letter dated July 21, 1987.

III

After consideration of the licensee's response and the statements of fact, explanation, and argument for mitigation contained therein, the NRC staff has determined, as set forth in the Appendix to this Order, that the violations occurred as stated and that the penalty proposed for the violations designated in the Notice of Violation and Proposed Imposition of Civil Penalty should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of Five Hundred Dollars (\$500) within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

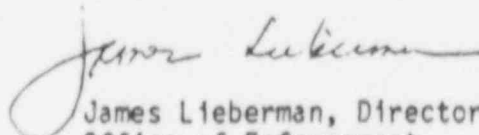
The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. A copy of the hearing request also shall be sent to the Assistant General Counsel for Enforcement, Office of General Counsel. If a hearing is requested,

the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

- (a) whether the licensee was in violation of the Commission's requirements as set forth in Violation I.A of the Notice of Violation and Proposed Imposition of Civil Penalty referenced in Section II above and
- (b) whether, on the basis of such violation, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


James Lieberman, Director
Office of Enforcement

Dated at Bethesda, Maryland
this 28 day of September 1987.

APPENDIX
EVALUATIONS AND CONCLUSIONS

On June 30, 1987, a Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was issued for violations identified during an NRC inspection. By letters dated July 21, 1987, Aztec Laboratories (licensee) responded to the Notice. In its response, the licensee admits certain violations occurred as described in the Notice, denies other violations, and provides reasons why it believes that mitigation of the proposed civil penalty is appropriate. Provided below are: (1) a restatement of each violation; (2) a summary of the licensee's response regarding each violation; (3) NRC's evaluation of the licensee's response; (4) the licensee's arguments in support of mitigation of the proposed civil penalty, and (5) NRC's conclusions regarding the violations and the proposed civil penalty.

I. Licensee's Arguments Regarding Violations Assessed Civil Penalty

A. Violation IA

Restatement of Violation

10 CFR 20.403(b)(4) requires each licensee to, within 24 hours of discovery of the event, report any event involving licensed material possessed by the licensee that may have caused or threatens to cause damage to property in excess of \$2,000.00.

Contrary to the above, from March 1984 until the date of inspection, the licensee failed to notify the NRC of a March 1984 fire which involved a gas chromatograph unit containing a nominal 14.5 millicuries of nickel-63, and which caused in excess of \$40,000 damage to both the facility and licensed material. Further decontamination costs including consultant fees, decontamination, and waste disposal exceeded \$2,000.

Summary of Licensee's Response

The licensee argues that a violation did not occur since the initial cost of the chromatograph device was less than \$2,000 and the damage to the building was caused primarily by the fire of March 1984 and not from the contamination resulting from the chromatograph device.

NRC Evaluation of Licensee's Response

10 CFR 20.403(b)(4) explicitly requires the reporting of "any event involving licensed material" that may have caused or threatens to cause damage to property in excess of \$2,000. The event in this case was the fire which involved the chromatograph device containing licensed material. The cost of the chromatograph device is not determinative. The intent of the reporting requirement described in 10 CFR 20.403(b)(4) is to afford the NRC the opportunity to review all circumstances surrounding incidents similar to the 1984 fire and perform radiological assessments of hazards that may be present. In this case, if the NRC had been notified of the 1984 event, involving licensed material an adequate evaluation of the device would have been performed and contamination would not have gone undetected for three

years. A license amendment describing the approved location for storage of devices would also have been required.

B. Violation IB

Restatement of Violation

10 CFR 20.201(b) requires each licensee to make or cause to be made such surveys as are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As defined by 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials. When appropriate, such evaluation includes a physical survey of the location of materials and equipment, and measurements of levels of radiation or concentrations of radioactive material present.

Contrary to the above, from March 1984 until the date of the inspection, the licensee failed to make a reasonable survey to evaluate the extent of radiation hazards present as a result of the March 1984 fire. Although a visual check of the source holder was made after the fire, radiation surveys and wipe tests for leakage were not performed. As a result between March 1984 and March 26, 1987, leakage from the nickel-63 source went undetected.

Summary of Licensee's Response

The licensee argues that surveys and wipe tests were not required because the nickel-63 source was in storage and never used.

NRC Evaluation of Licensee's Response

NRC expects licensees to perform wipe tests and surveys of sources whenever sources may be damaged. Since the licensee's source was in a fire, wipe tests and surveys should have been performed. This is evident since the nickel-63 source was severely damaged and was leaking radioactive material.

II. Licensee's Arguments Regarding Violations Not Assessed Civil Penalty

A. Violation IIA

Restatement of the Violation

10 CFR 20.207(a) states that licensed materials stored in an unrestricted area shall be secured from unauthorized removal from the place of storage.

Contrary to the above, from March 1984 until the date of inspection, a nickel-63 source containing 14.5 millicuries was stored at the

licensee's Arlington Street facility and was not secured from unauthorized removal.

This is a Severity Level IV violation (Supplement IV).

Summary of Licensee's Response

Although the licensee admits that the actual structure was open, the licensee argues that the location of the building, partial fencing, and large size of the property effectively secured the device and prevented unauthorized removal.

NRC Evaluation of Licensee's Response

On March 26, 1987, the inspector went to the licensee's residence and found no one at home. The inspector then walked over to the burned facility and immediately viewed the device on the porch. The inspector found the nickel-63 source housing laying loose on top of the chromatograph device. While it is true that the licensee's property is large and partially fenced, the burned building was visible from the street and the entrance to the property was not fenced.

There were no caution signs, ropes or any other obstructions to keep an individual from becoming contaminated or even removing the source. During the inspection, the licensee admitted that the facility was not restricted for the purpose of radiation protection.

B. Violation IIB

Restatement of Violation

License Condition No. 17 requires each chromatograph detector cell containing nickel-63 to be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, a detector cell received from another person shall not be put into use until tested.

Contrary to the above, each chromatograph detector cell containing nickel-63 has not been tested for leakage and/or contamination every six (6) months as required. Specifically, as of the day of this inspection, one detector cell at the Arlington facility had not been tested for leakage since at least September 1982 and two detector cells, located at the Stadium Drive facility, had not been tested since at least February 1986. Furthermore, the two detector cells at the Stadium Drive facility were received in February 1986 in the absence of a certificate from the transferor indicating that a test had been made within six (6) months prior to transfer and one detector was put into use.

This is a Severity Level IV violation (Supplement VI).

Summary of Licensee's Response

The licensee does not contest the violation.

C. Violation IICRestatement of Violation

License Condition No. 18 requires the licensee to conduct a physical inventory every six (6) months to account for all files received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, location of files, and the date of the inventory.

Contrary to the above, as of the date of inspection, records of inventories have not been maintained as required since September 1982.

This is a Severity Level V violation. (Supplement VI).

Summary of Licensee's Response

The licensee states that all records were lost in the fire and while filed inventories were not available, the licensee was able at the time of the inspection to immediately point out to the inspector where the detectors were in the stadium drive location.

NRC Evaluation of Licensee's Response

At the time of the inspection, the licensee stated that visual inventories were performed more often than six months, however, records of inventories were not made. Since records of inventories, even after the fire in 1984, were not maintained as required, the violation remains as stated in the Notice of Violation.

D. Violation IIDRestatement of Violation

License Condition No. 10 states licensed material shall be used only at the licensee's facilities located at 3933 Arlington Street, Kansas City, Missouri.

Contrary to the above, in February 1986, two detector cells containing licensed material were received at a facility not authorized by this license where one detector cell was placed in storage and one detector cell was put into use.

This is a Severity Level IV violation. (Supplement VI).

Summary of Licensee's Response

The licensee does not contest the violation.

III. Licensee's Arguments for Mitigation of Civil Penalty

In requesting mitigation of the proposed civil penalty, the licensee points out three reasons why the civil penalty should not be imposed. The licensee states that once it became aware of the errors, actions were taken in an expeditious manner to correct the problem. The licensee also states that it does not have a prior history of similar events and that imposition of a civil penalty at this time would present a financial hardship on the licensee.

NRC's Evaluation of Licensee's Arguments for Mitigation of Civil Penalty

It is important to establish that the event was discovered by the NRC. As a result, a Confirmatory Action Letter was issued on April 10, 1987 to the licensee outlining several actions which needed immediate attention. The NRC agrees that the licensee dealt with those actions within the time frame specified in the letter. NRC Enforcement Policy 10 CFR Part 2, Appendix C, Section V.B.2 states, "Unusually prompt and extensive corrective action may result in reducing the proposed civil penalty as much as 50 percent of the base value." The fire occurred in March 1984 and contamination of the facility went undetected until the March 26, 1987 inspection by the NRC. Once the problem was identified, the NRC provided guidance to the licensee on what actions were needed to assure the contamination was not widespread and how to properly decontaminate the facility and properly dispose of the radioactive waste. While the NRC agrees that the licensee complied with the actions contained in the Confirmatory Action Letter, NRC does not consider these actions unusually prompt or extensive.

Since the licensee had never been inspected prior to the March 25 through May 15, 1987 inspection, no basis to determine the licensee's inspection history exists. The violations identified during the inspection would indicate that the violations have been ongoing for a number of years.

In reviewing the licensee's argument that the proposed civil penalty of Five Hundred Dollars (\$500) would impose a significant financial hardship on the laboratory, the licensee has not provided sufficient information to warrant mitigation of the proposed civil penalty.

NRC Conclusion

The NRC staff has concluded that all violations did occur as originally stated in the June 30, 1987 Notice of Violation and Proposed Imposition of Civil Penalties. These violations collectively show the licensee's failure to fully understand NRC requirements and the significance of the March 1984 event. A sufficient basis was not provided for mitigation of the proposed civil penalty. Therefore, the NRC staff has concluded that a \$500 civil penalty should be imposed.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JAN 20 1988

Docket No. 020-12910
License No. 24-17529-01
FA 87-34

Aztec Laboratories
ATTN: Merrill Nissen
P. O. Box 31044
Kansas City, MO 64129

Gentlemen:

SUBJECT: ORDER IMPOSING CIVIL PENALTY AND SCHEDULE OF PAYMENTS

This refers to your letters of November 7 and 9, 1987, in response to a phone conversation with Mr. Bernard Stapleton of the NRC, Region III staff, on November 6, 1987. In your response, you requested mitigation and/or rescission of the civil penalty and inspection fee which resulted from the March 25 through May 15, 1987 inspection at your Arlington Street facility.

On September 28, 1987, the NRC imposed a Five Hundred Dollar (\$500.00) civil penalty in order to emphasize the need for stricter controls over your radiation safety program, and to notify the NRC of significant events which may impact the public health and safety.

After reviewing your response and given the current financial condition of your company, we would agree to allow you to pay the imposed civil penalty and inspection fee in twelve monthly installments, in lieu of one lump payment. We will review the effectiveness of your corrective actions during a subsequent inspection.

In the event that you choose to pay in monthly installments, we are enclosing a promissory note which you should read carefully, sign on Page 3, and return to the Director, Division of Accounting and Finance, Office of Administration and Resource Management, NRC, with your first installment payment of \$89.06 before February 1, 1988. Please note that your signature constitutes a waiver of your right to contest the amount of the civil penalty and the underlying violations on which it is based and the amount of the inspection fee under Section 234c of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2282c.

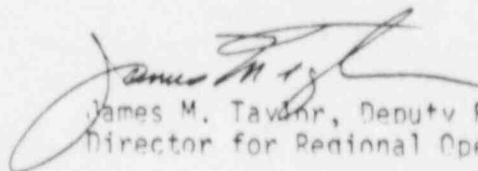
Further, you are cautioned that if the Director, Division of Accounting and Finance, does not receive your signed promissory note and your first installment payment by March 1, 1988 we may take action under the Atomic Energy Act of 1954, as amended, to revoke or modify your license and to collect the debt.

Aztec Laboratories

- 2 -

In accordance with Section 2.790 of the NPC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NPC's Public Document Room.

Sincerely,



James M. Tavan, Deputy Executive
Director for Regional Operations

Enclosure: Promissory Note
in Payment of Preexisting
Debt



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

JUL 24 1987

Docket No. 30-05373
License No. 29-09814-01
EA 87-79

Eastern Testing and Inspection, Inc.
ATTN: Mr. H. J. Soni
President
9220 Collins Avenue
Pennsauken, New Jersey 08110

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC Inspection No. 87-01)

This refers to the NRC inspection of activities authorized by NRC License No. 29-09814-01 conducted on April 3, 1987 at your facility in Pennsauken, New Jersey, and on April 15, 1987 at a field site in Philadelphia, Pennsylvania. This also refers to the supplemental visit conducted on June 9, 1987 at your Pennsauken facility as part of the inspection. The report of the inspection efforts conducted in April was forwarded to you on May 18, 1987. The results of the June visit will be described in the enforcement conference report which will be issued at a later date. During the initial inspection, violations of NRC requirements were identified. On May 21, 1987, we held an enforcement conference with you and a member of your staff during which the violations, their causes, and your corrective actions were discussed.

The violation in Section I of the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice) involves the failure to maintain the audible warning signal to the iridium-192 cell in an operable status. This violation is of particular concern to the NRC since it could have resulted in unnecessary exposure of individuals to radiation, and was also similar to a violation identified during an NRC inspection in 1982. The purpose of this alarm is to provide a warning to any individual who opens the door to this cell while the source is exposed. Although no individuals entered the room while the source was exposed, the potential existed for such an entry.

The violations in Section II of the enclosed Notice involve failure by radiographic personnel to properly use their dosimeters; failure by management to audit activities of certain radiographic personnel at the required frequency; and transportation of a radiography source to a field site without the source being accompanied by the required shipping papers. These violations are similar to three of the seven violations identified by the NRC during a previous inspection in 1986. Consequently, your corrective actions taken to prevent recurrence of these violations were not effective. This failure to take effective corrective action is of significant concern to the NRC.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

To emphasize the need for (1) adherence to regulatory requirements to ensure safe performance of licensed activities; and (2) prompt and effective correction of deficiencies when they are identified, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director of Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Six Thousand Five Hundred Dollars (\$6,500) for the violations described in Sections I and II of the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violation set forth in Section I of the Notice has been classified as a Severity Level III violation to emphasize the importance of adequate oversight and control of licensed activities. The other violations set forth in Section II of the enclosed Notice have been categorized at a Severity Level IV. The base civil penalty amounts for a Severity Level III or IV violation or problem are \$5,000 and \$1,500, respectively. Although a civil penalty is not normally proposed for a Severity Level IV matter, in accordance with the Enforcement Policy, a civil penalty is proposed in this case because these violations were similar to previous violations for which you did not take effective corrective action. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustments were deemed appropriate.

You are required to respond to this letter and should follow the instructions specified in the Notice in preparing your response. In your response, you should document the specific actions taken to correct the violations and any additional actions you plan to prevent recurrence. Your response to this Notice, including your proposed corrective actions and the results of future inspections, will be considered in determining whether further enforcement action is necessary to ensure compliance with NRC regulatory requirements. Unless significant improvements are made in the performance of licensed activities at Eastern Testing and Inspection, Inc., the NRC will consider whether modification, suspension or revocation of your license is appropriate.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed Notice will be placed in the NRC's Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,



William T. Russell
Regional Administrator

Enclosure: Notice of Violation and Proposed Imposition of Civil Penalties

Eastern Testing and Inspection, Inc. 3

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Eastern Testing and Inspection, Inc.
Pennsauken, New Jersey 08110

Docket No. 30-05373
License No. 29-09814-01
EA 87-79

During an NRC inspection conducted on April 3 and 15, 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 civil penalties pursuant to Section 234 of the Atomic Energy Act of 1984, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and the associated civil penalties are set forth below:

I. VIOLATION INVOLVING AN INOPERABLE ALARM

10 CFR 34.29(b) requires that each entrance used for personnel access to the high radiation area in a permanent radiographic installation have both visible and audible warning signals to warn of the presence of radiation. The audible signal shall be actuated whenever an attempt is made to enter the installation while the radioactive source is exposed.

Contrary to the above, on April 3, 1987, the personnel access point (a sliding door) to the high radiation area of the iridium-192 radiography cell at the licensee's permanent facility in Pennsauken, New Jersey, did not have an audible signal which was activated whenever an attempt was made to enter the installation when the source was exposed. Specifically, the bell was taped so that it would not activate as required.

This is a Severity Level III violation (Supplement IV).

Civil Penalty - \$5,000

II. VIOLATIONS ASSOCIATED WITH DOSIMETER, AUDIT AND TRANSPORTATION REQUIREMENTS

A. 10 CFR 34.33(a) requires that a radiographer and radiographer's assistant, whenever performing radiographic activities, shall wear pocket dosimeters which have been recharged at the start of each shift.

Contrary to the above, on April 15, 1987, at a field site in Philadelphia, Pennsylvania, a radiographer and a radiographer's assistant did not recharge their pocket dosimeter at the start of the shift in which they performed radiographic activities.

- B. Condition 16 of License No. 29-09814-01 requires that licensed material be possessed and used in accordance with the statements, representations and procedures contained in a letter from the licensee dated January 12, 1987. Item 4.b. of the letter dated January 12, 1987 requires that each individual involved in radiographic activities be audited at a jobsite on a quarterly basis.

Prior to its renewal on February 20, 1987, Condition 16 required that licensed material be possessed and used in accordance with the statements, representations and procedures contained in a letter received from the licensee on July 30, 1981. Item 4 of the letter received on July 30, 1981 required that a comprehensive audit program be conducted every 3 months of each individual involved in radiography.

Contrary to the above, during the fourth quarter of 1986 and the first quarter of 1987, at least four individuals involved in radiographic activities were not audited.

- C. 10 CFR 71.5(a) requires that each licensee who transports licensed material outside the confines of its plant or who delivers licensed material to a carrier for transport shall comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation in 49 CFR Parts 170-189. 49 CFR 172.200 requires that shipping papers be furnished for each shipment of hazardous material. 49 CFR 172.101, and its associated Hazardous Material Table, lists radioactive material as a hazardous material.

Contrary to the above, on April 15, 1987, radioactive material, specifically, an iridium-192 radiography source, was transported from the licensee's facility in Pennsauken, New Jersey to a field site in Philadelphia, Pennsylvania without being accompanied by the required shipping papers.

Each of these violations have been categorized at Severity Level IV (Supplements IV and V).

Cumulative Civil Penalty - \$1,500 (assessed equally among the violations).

Pursuant to the provision of 10 CFR 2.201, Eastern Testing and Inspection, Inc. (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

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 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 amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406.

FOR THE NUCLEAR REGULATORY COMMISSION

W. T. Russell

William T. Russell
Regional Administrator

Dated at King of Prussia, Pennsylvania,
this 24th day of July 1987



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

OCT 20 1987

Docket No. 30-05373
License No. 29-09814-01
EA 87-79

Eastern Testing and Inspection, Inc.
ATTN: Mr. H. J. Sont
President
9220 Collins Avenue
Pennsauken, New Jersey 08110

Gentlemen:

Subject: Order Imposing Civil Monetary Penalties

This refers to your two letters dated August 21, 1987, and a subsequent letter dated September 8, 1987, in response to the Notice of Violation and Proposed Imposition of Civil Penalties sent to you with our letter dated July 24, 1987. Our letter and Notice describe violations identified during NRC Inspection No. 87-01, conducted on April 3 and April 15, 1987.

To emphasize the need for (1) adherence to regulatory requirements to ensure safe performance of licensed activities; and (2) prompt and effective correction of deficiencies when they are identified, civil penalties in the amount of Six Thousand Five Hundred Dollars (\$6,500) were proposed.

In your response, you do not deny any of the cited violations but request mitigation of the civil penalties based on several factors, including the current financial condition of the company. After careful consideration of your response, we have concluded, for the reasons given in the Appendix attached to the enclosed Order Imposing Civil Monetary Penalties, that although a sufficient basis has not been provided for full mitigation of the civil penalties, the penalties in this instance should be reduced because of your financial condition. Accordingly, we hereby serve the enclosed Order on Eastern Testing and Inspection, Inc., imposing civil penalties in the amount of \$3,250 Dollars. Given the current financial condition of your company, we would agree to allow you to pay the imposed civil penalties in twenty-four monthly installments, in lieu of one lump sum payment. We will review the effectiveness of your corrective actions during a subsequent inspection.

In the event that you choose to pay in monthly installments, we are enclosing a promissory note, which you should read carefully, sign on Page 3, and return to the Director, Division of Accounting and Finance, Office of Administration and Resource Management, NRC, with your first installment payment of \$147.17 before November 15, 1987. Please note that your signature constitutes a waiver of your right to contest the amount of the civil penalties and the underlying violations and empowers the United States to obtain a judgment provision against you without a hearing in the event that you fail to make a required payment.

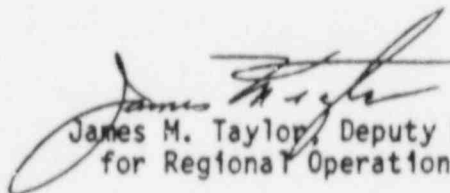
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Eastern Testing and Inspection, Inc. - 2 -

Further, you are cautioned that if the Director, Division of Accounting and Finance, does not receive your signed promissory note and your first installment payment by November 15, 1987 we may take action under Section 234c of the Atomic Energy Act of 1954, as amended, 42 U.S.C §2282c.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room.

Sincerely,



James M. Taylor, Deputy Executive Director
for Regional Operations

Enclosures:

1. Order Imposing Civil Monetary Penalties
2. Appendix - Evaluation and Conclusion
3. Promissory Note in Payment of Preexisting Debt

cc w/encls:

J. Badiali, Vice President
Public Document Room
Nuclear Safety Information Center (NSIC)
State of New Jersey

UNITED STATES
NUCLEAR REGULATORY COMMISSION

| | | | |
|--------------------------------------|---|-------------|-------------|
| In the Matter of |) | Docket No. | 30-05373 |
| |) | License No. | 29-09814-01 |
| Eastern Testing and Inspection, Inc. |) | EA 87-79 | |
| 9220 Collins Avenue |) | | |
| Pennsauken, New Jersey 08110 |) | | |

ORDER IMPOSING CIVIL MONETARY PENALTIES

I

Eastern Testing and Inspection, Inc., Pennsauken, New Jersey 08110 (the "licensee") is the holder of Byproduct Material License No. 29-09814-01 (the "license") issued by the Nuclear Regulatory Commission (the "Commission" or "NRC") which authorizes the licensee to perform industrial radiography. The license was issued on February 2, 1964, was most recently renewed on February 20, 1987, and is due to expire on February 29, 1992.

II

An NRC safety inspection of the licensee's activities under the license was conducted on April 3 and 15, 1987. During the inspection, the NRC staff determined that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalties was served upon the licensee by letter dated July 24, 1987. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of civil penalties proposed for the violations. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalties by letters dated August 21, 1987 and September 8, 1987.

III

After consideration of the licensee's response and the statements of fact, explanations, and argument for mitigation contained therein, the Deputy Executive Director for Regional Operations has determined, as set forth in the Appendix to this Order, that the violations occurred as stated but, given the current financial condition of the Company, the penalties proposed for the violations designated in the Notice of Violation and Proposed Imposition of Civil Penalties should be reduced to \$3,250 and the licensee should be allowed to pay the imposed penalties in twenty-four monthly installments.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2282, PL 96-295), and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay civil penalties, either:

- a. in the full amount of Three Thousand Two Hundred and Fifty Dollars (\$3,250), within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555; or,

- b. in twenty-three equal monthly installments of \$147.17 each, and a twenty-fourth installment of \$147.26 by check, draft, or money order payable to the Treasurer of the United States, which includes interest accruing from November 15, 1987 at the rate of 8 1/8 percent per year, as described in the schedule of monthly installments provided with the enclosed "Promissory Note in Payment of Preexisting Debt," which the licensee must provide with the first payment to the Director, Division of Accounting and Finance, Office of Resource Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, within thirty days of the date of the Order. The licensee's signature of the "Promissory Note in Payment of Preexisting Debt" constitutes a waiver of a right to request a hearing as provided below, to contest the amount of the civil penalties and the underlying violations, and empowers the United States to obtain a judgment provision against it without a hearing in the event it fails to make a required payment.

V

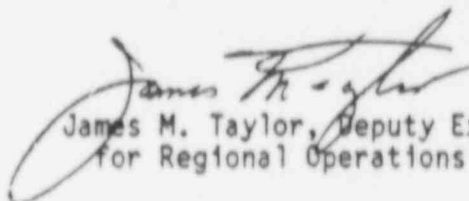
The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing shall be clearly marked as a "Request for an Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, Region I.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

- (a) whether the licensee was in violation of the Commission requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties as referenced in Section II above; and
- (b) whether, on the basis of such violation, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Bethesda, Maryland
this 20 day of October 1987

APPENDIX

EVALUATIONS AND CONCLUSIONS

On July 24, 1987, a Notice of Violation and Proposed Imposition of Civil Penalties (NOV) was issued for violations identified during a routine NRC inspection. Eastern Testing and Inspection, Inc., responded to the Notice by two letters dated August 21 and a letter dated September 8, 1987. In its responses, the licensee does not deny any of the violations, but requests mitigation of the civil penalties. The NRC's evaluation and conclusion regarding the licensee's arguments are as follows:

Restatement of Violations

I. VIOLATION INVOLVING AN INOPERABLE ALARM

10 CFR 34.29(b) requires that each entrance used for personnel access to the high radiation area in a permanent radiographic installation have both visible and audible warning signals to warn of the presence of radiation. The audible signal shall be actuated whenever an attempt is made to enter the installation while the radioactive source is exposed.

Contrary to the above, on April 3, 1987, the personnel access point (a sliding door) to the high radiation area of the iridium-192 radiography cell at the licensee's permanent facility in Pennsauken, New Jersey, did not have an audible signal which was activated whenever an attempt was made to enter the installation when the source was exposed. Specifically, the bell was taped so that it would not activate as required.

This is a Severity Level III violation (Supplement IV).

Civil Penalty - \$5,000

II. VIOLATIONS ASSOCIATED WITH DOSIMETER, AUDIT AND TRANSPORTATION REQUIREMENTS

- A. 10 CFR 34.33(a) requires that a radiographer and radiographer's assistant, whenever performing radiographic activities, shall wear pocket dosimeters which have been recharged at the start of each shift.

Contrary to the above, on April 15, 1987, at a field site in Philadelphia, Pennsylvania, a radiographer and a radiographer's assistant did not recharge their pocket dosimeter at the start of the shift in which they performed radiographic activities.

- B. Condition 16 of License No. 29-09814-01 requires that licensed material be possessed and used in accordance with the statements, representations and procedures contained in a letter from the licensee dated January 12, 1987. Item 4.b. of the letter dated January 12, 1987 requires that each individual involved in radiographic activities be audited at a jobsite on a quarterly basis.

Prior to its renewal on February 20, 1987, Condition 16 required that licensed material be possessed and used in accordance with the statements, representations and procedures contained in a letter received from the licensee on July 30, 1981. Item 4 of the letter received on July 30, 1981 required that a comprehensive audit program be conducted every 3 months of each individual involved in radiography.

Contrary to the above, during the fourth quarter of 1986 and the first quarter of 1987, at least four individuals involved in radiographic activities were not audited.

- C. 10 CFR 71.5(a) requires that each licensee who transports licensed material outside the confines of its plant or who delivers licensed material to a carrier for transport shall comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation in 49 CFR Parts 170-189. 49 CFR 172.200 requires that shipping papers be furnished for each shipment of hazardous material. 49 CFR 172.101, and its associated Hazardous Material Table, lists radioactive material as a hazardous material.

Contrary to the above, on April 15, 1987, radioactive material, specifically, an iridium-192 radiography source, was transported from the licensee's facility in Pennsauken, New Jersey to a field site in Philadelphia, Pennsylvania without being accompanied by the required shipping papers.

Each of these violations have been categorized at Severity Level IV (Supplements IV and V).

Cumulative Civil Penalty - \$1,500 (assessed equally among the violations).

SUMMARY OF LICENSEE RESPONSE

The licensee, in its responses, does not deny any of the violations. However, the licensee does request mitigation of the civil penalties based on: (1) its corrective action for the violations which included implementing a daily check of the alarm system, implementing a comprehensive audit program, and incorporating a back-up system to ensure that shipping papers will always accompany a source; (2) extenuating circumstances (illness of the Radiation Safety Officer) that contributed to one of the violations (II.B); (3) its stated claim that these violations in no way reflect its overall safety program, which has been operating safely since incorporation in 1964; (4) the fact that none of the violations resulted in exposure to any individual; and (5) the severe economic posture of the company.

NRC EVALUATION OF LICENSEE RESPONSE

When the NRC proposed the civil penalties, it considered the licensee's corrective actions for the violations. Although these corrective actions were considered acceptable, they were not considered unusually prompt and extensive. Therefore, no adjustment of the civil penalties was deemed appropriate.

While the NRC recognizes that the illness of the Radiation Safety Officer may have contributed to one of the violations, these circumstances do not provide a basis for mitigation of the civil penalties. If the responsibilities of the license can not be implemented by a particular individual, it is the licensee's responsibility to ensure that others are assigned to assure that licensed activities are conducted safely and in accordance with the terms of the license.

With respect to the licensee's claim that its overall safety record provides a basis for mitigation, the NRC disagrees with this claim, since, as explained in the July 24, 1987 letter sent with the Notice of Violation, all four of the violations identified during this inspection had been identified during previous inspections at the facility. In fact, prior to this inspection, 26 violations were previously identified during NRC inspections of this licensee since 1979, including violations that resulted in the imposition of a \$6,900 civil penalty (EA 79-002) on July 3, 1980. Furthermore, a \$2,300 civil penalty (EA 74-003) was imposed on August 12, 1974, for seven other violations of NRC requirements. Given this history of violations and civil penalties, the licensee's overall safety record does not provide a basis for mitigation.

In addition, the licensee's claim that the violations did not result in a radiation exposure to any individual does not provide a basis for mitigation of the penalties since the potential for such exposure existed. As stated in the July 24, 1987 Notice of Violation and Proposed Imposition of Civil Penalties, the failure to maintain the audible warning signal to the Iridium-192 cell in an operable status is of particular concern to the NRC since it could have resulted in unnecessary exposure of individuals to radiation, and was similar to a violation identified during an inspection in 1982. If an individual had received a radiation exposure, the civil penalty for this violation probably would have been increased.

The NRC Enforcement Policy recognizes that a licensee's ability to pay is a proper consideration in determining the amount of a civil penalty. The licensee's financial information submitted in its September 8, 1987 letter demonstrates that imposition of a civil penalty in the amount proposed would create a severe financial burden. Recognizing the current financial situation, the penalty is being reduced by 50 percent. The NRC also finds, consistent with its Enforcement Policy, that the imposition of the reduced civil penalties will not result in economic termination of the licensee's business or financial hindrance of the licensee's ability to safely conduct licensed activities. However, the NRC has concluded that given the economic position of the company, the licensee should be allowed to pay the reduced penalties in twenty-four monthly installments.

NRC CONCLUSION

The proposed civil penalties in the amount of \$3,250 should be imposed. However, given the current financial condition of the Company, the licensee may pay the civil penalties in twenty-four monthly installments.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 21 1987

Docket No. 030-13435
License No. 53-17854-01
EA No. 87-186

Finlay Testing Laboratories, Inc.
Testing and Inspection Services
99-940 Iwaena Street
Aiea, Hawaii 96701

Gentlemen:

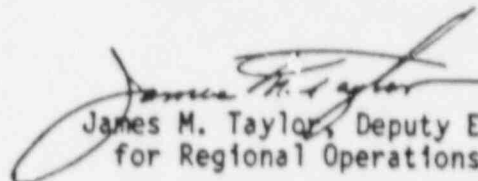
SUBJECT: ORDER SUSPENDING LICENSE
(EFFECTIVE IMMEDIATELY)

Enclosed is an Order, effective immediately, suspending your byproduct material license.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

The responses directed by this letter and accompanying Order are not subject to the clearance procedures of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, PL 96-5.1.

Sincerely,



James M. Taylor, Deputy Executive Director
for Regional Operations

Enclosure: As Stated

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the matter of)

FINLAY TESTING LABORATORIES INC.)
Testing and Inspection Services)
99-940 Iwaena Street)
Aiea, Hawaii 96701)

Docket No. 030-13435
License No. 53-17854-01
EA 87-186

ORDER SUSPENDING LICENSE
(EFFECTIVE IMMEDIATELY)

I

Finlay Testing Laboratories, Inc., (the licensee) Testing and Inspection Services, 99-940 Iwaena Street, Aiea, Hawaii 96701, is the holder of Byproduct Material License No. 53-17854-01 issued by the Nuclear Regulatory Commission (NRC/Commission) on March 1, 1978 pursuant to 10 CFR Part 34. The license is due to expire on August 31, 1988. The license authorizes the licensee to possess and use licensed materials (cobalt-60, iridium-192, and cesium-137 sources of up to 30, 100, and 0.14 curies per source, respectively) in industrial radiography and survey instrument calibration. The license specifies that sources shall be used by, or under the supervision of, Gordon Finlay or individuals who have completed the training program described in letters dated February 28, 1983 and August 2, 1983.

II

In response to allegations received by the NRC Region V office, an investigation was initiated on August 31, 1987. The allegations included:

1. Exposure devices being placed by the licensee in luggage and loaded on commercial passenger aircraft for flights to and from the islands of Oahu and Hawaii, and on military cargo/passenger aircraft to Johnston Island.

2. Failure to use shipping papers or labels for those transfers.

During the investigation at the licensee's office in Aiea, island of Oahu, NRC personnel inquired about activities conducted under the NRC license. The licensee's Radiation Safety Officer initially denied that work had been performed on the island of Hawaii. When confronted with evidence of that work, however, he admitted that the work had been done. Radiographers employed by the licensee also stated during discussions with NRC personnel that radiographic work had been performed on the island of Hawaii during 1987 and that licensed material had been transported on passenger-carrying aircraft in violation of federal regulations.

The licensee's representatives were unable to produce required documentation that showed that work had been performed on the island of Hawaii or that the licensed material had been transported from the island of Oahu to the island of Hawaii in accordance with federal regulations. The investigation disclosed substantial evidence that, in fact, the material had been transported in luggage via commercial passenger aircraft in violation of federal regulations which prohibit the transportation of radioactive material on passenger aircraft. 10 CFR 71.5 and 49 CFR 173.448(f).

The NRC investigation also confirmed that on August 18, 1987 the licensee shipped a radiographic device by military passenger/cargo plane to Johnston Island also in violation of federal regulations. 10 CFR 71.5 and 49 CFR 173.448(f). In both instances, labeling and documentation requirements were not met.

III

The federal regulations for shipping radioactive material have been established, in part, to protect the public, including passengers in aircraft, from the potentially serious dangers of radioactive material. For the safety of handlers and passengers, regulations dictate packaging, labeling, and documentation requirements for shipping radioactive material and limit the types of flights on which the material may be carried.

While the investigation is continuing, the information developed to date indicates that the violations appear to be deliberate, which raises a question whether the licensee is able or willing to comply with the Commission's requirements to protect the public health and safety. Therefore, the NRC no longer has reasonable assurance that licensed activities will be conducted without undue risk to the public health and safety. I have determined pursuant to 10 CFR 2.201(c) and 2.202(f) that the public health and safety require that the license be suspended pending the results of the investigation, that the suspension be immediately effective, and that no prior notice is required.

IV

Accordingly, in view of the foregoing and pursuant to sections 81, 161b, 161c, 161i, 161o, 182 and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Section 2.202 and 10 CFR Parts 30 and 34, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT:

- A. Activities under License No. 53-17854-01 are suspended.

- B. The licensee shall place all byproduct material in its possession in locked storage and notify the Region V office of compliance.

The Regional Administrator, Region V, may, in writing, relax or rescind any of the above provisions on demonstration of good cause by the licensee.

V

Pursuant to 10 CFR 2.202(b), the licensee may show cause why License No. 53-17854-01 should not be suspended by filing a written answer under oath or affirmation within 20 days of the date of issuance of this Order, setting forth the matters of fact and law on which the licensee relies. The licensee may answer this Order, as provided in 10 CFR 2.202(d), by consenting to the provisions specified in Section IV above. Upon consent of the licensee to the provisions set forth in Section IV of this Order, or on failure of the licensee to file an answer within the specified time, the provisions specified in Section IV above shall be final without further Order.

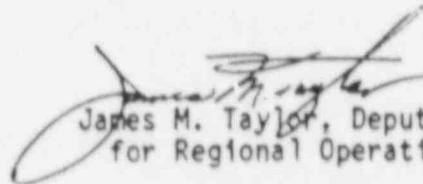
VI

Pursuant to 10 CFR 2.202(b), the licensee or any other person adversely affected by this Order may request a hearing within 20 days of this Order. An answer to this Order and any request for a hearing shall be submitted to the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555. Copies shall also be sent to the Assistant General

Counsel for Enforcement, at the same address, and to the Regional Administrator, U. S. Nuclear Regulatory Commission, Region V, 1450 Maria Lane, Suite 210, Walnut Creek, California 94596. If a person other than the licensee requests a hearing, that person shall set forth with particularity the manner in which the petitioner's interest is adversely affected by this Order and should address the criteria set forth in 10 CFR 2.714(d). An answer to this Order or a request for hearing shall not stay the immediate effectiveness of this Order.

If a hearing is requested by the licensee or a person whose interest is adversely affected, the Commission shall issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Bethesda, Maryland,
this 21 day of September 1987.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 11 1988

Docket No. 030-13435
License No. 53-17854-01
EA 88-69

Finlay Testing Laboratories, Inc.
Testing and Inspection Services
99-940 Iwaena Street
Aiea, Hawaii 96701

Gentlemen:

SUBJECT: ORDER CONTINUING SUSPENSION OF LICENSE AND ORDER TO SHOW CAUSE
WHY LICENSEE SHOULD NOT BE REVOKED, AND NOTICE OF VIOLATION

Enclosed is an Order, effective immediately, that continues the suspension of your byproduct material license and orders you to show cause why your licensee should not be revoked.

The matter of a civil penalty is being held for further consideration.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

The responses directed by this letter and accompanying Order are not subject to the clearance procedures of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,


James M. Taylor, Deputy Executive Director
for Regional Operations

Enclosure: As Stated

UNITED STATES
NUCLEAR REGULATORY COMMISSION

| | | |
|-----------------------------------|---|-------------------------|
| In the matter of |) | |
| |) | |
| FINLAY TESTING LABORATORIES, INC. |) | Docket No. 030-13435 |
| Testing and Inspection Services |) | License No. 53-17854-01 |
| 99-940 Iwaena Street |) | EA 88-69 |
| Aiea, Hawaii 96701 |) | |

ORDER CONTINUING SUSPENSION OF LICENSE
(EFFECTIVE IMMEDIATELY) AND ORDER TO SHOW
CAUSE WHY LICENSE SHOULD NOT BE REVOKED

I

Finlay Testing Laboratories, Inc. (the licensee), Testing and Inspection Services, 99-940 Iwaena Street, Aiea, Hawaii 96701, is the holder of Byproduct Material License No. 53-17854-01 (license) issued by the Nuclear Regulatory Commission (NRC/Commission). The license authorized the licensee to possess and use licensed materials (cobalt-60, iridium-192, and cesium-137 sources of up to 30, 100, and 0.14 curies per source, respectively) in industrial radiography and survey instrument calibration. On September 21, 1987 the license was suspended by Order entitled "Order Suspending License (Effective Immediately)" pending further investigation of the licensee. Pursuant to 10 CFR 2.202(f), that Order was temporarily effective pending further order. This Order addresses the results of the further investigation and continues the suspension directed by the September 21, 1987 Order.

II

In response to allegations received by the NRC Region V office, an inspection and an investigation of alleged violations of NRC requirements were initiated on August 31, 1987. The inspection and investigation indicated that on February 9 and 14, 1987 and August 18, 1987, the licensee had caused the shipment of radiographic exposure devices containing radioactive sources on

passenger-carrying aircraft by concealing the nature of the material being offered for transport. As a result, on September 21, 1987, the NRC issued an Order Suspending License, effective immediately.

III

Since issuance of the September 21, 1987 suspension order, the NRC staff has continued to investigate and inspect the performance of the licensee in terms of compliance with NRC regulations, including the alleged willful and repeated violations of federal regulations involving the shipment of radiographic exposure devices on military and civilian passenger aircraft flights. Investigation findings since the September 21, 1987 Order have revealed new information indicating further examples of violations showing that the licensee was unable or unwilling to comply with the Commission's requirements to protect the public health and safety. These violations, together with those that were the basis of the previous Order, are set out in detail in the attached Notice of Violation. The more significant violations are summarized as follows:

- A. Contrary to applicable NRC and Department of Transportation (DOT) regulations designed to prevent radioactive exposure of airline passengers and employees, on February 9 and 14, 1987 and April 3 and 14, 1987, on six separate passenger carrying flights, the licensee shipped concealed radiographic exposure devices containing licensed radioactive material between the islands of Hawaii and Oahu.

Furthermore, contrary to requirements, there are no records of surveys necessary to demonstrate that, in each instance, the source was in its

shielded position. Of these shipments, at least four involved more than one licensee employee.

Also, on January 29, 1987 and August 18, 1987, the licensee delivered radiographic exposure devices to military transportation authorities for transport between Oahu and Johnston Island on military passenger/cargo aircraft without revealing the nature of the material being offered for shipment and without proper package certification, labeling, and shipping documents.

6. In its response of October 5, 1987 to the NRC Order of September 21, 1987, the licensee stated:

The transportation violations that occurred were isolated, aberrational and unanticipated events in the job performance of the involved radiographers. They were not authorized by Finlay Testing or Gordon Finlay, and certainly were not the usual course of business at Finlay Testing.

Contrary to this assertion, the evidence developed by the investigation indicates that transportation violations were regular occurrences and were the result of deliberate and willful conduct of Finlay Testing. The evidence indicates that, of the eight licensee employees who performed radiography for the licensee in 1987, seven have admitted or have been identified as having taken part in shipments that violated significant requirements. The licensee's Radiation Safety Officer/General Manager was among the involved employees.

The evidence further shows that in at least two instances, the violations occurred with the knowledge of, and in one of those instances, at the direction of, the president and owner of Finlay Testing Laboratories, Inc., Gordon Finlay, notwithstanding objections by the employees involved that the shipments were improper. In one shipment from Johnston Island to Oahu, Gordon Finlay took possession of the source in an unmarked container when it arrived at the MAC terminal. Prior to the shipment, Mr. Finlay advised the employee who was bringing the source to Oahu not to divulge to anyone the nature of the material being shipped.

The evidence indicates that Mr. Finlay was directly involved in these violations. For example, the evidence indicates that although he called the U. S. Army Director of Logistics several times and learned the correct procedures for packing and labeling a source for transportation by the Military Airlift Command, he ignored the procedures.

The licensee was unable to provide the NRC inspectors required records associated with source utilization on the island of Hawaii for the dates February 9-14, 1987 and April 3 and 14, 1987, the dates of improper shipments to the island of Hawaii. In contrast, the licensee was able to provide to the NRC inspectors the required records, in all but one case, for source utilization off the island of Oahu for shipments where the records indicated that shipments were proper. A reasonable inference from the absence of source utilization records and shipping documents for dates related to improper shipments is that Finlay Testing Laboratories, Inc., had attempted to prevent the NRC from discovering the transportation violations through normal inspection techniques.

- C. The license specifies that sources were to be used by, or under the supervision of, Gordon Finlay or individuals who had completed the training program described in letters dated February 28, 1983 and August 2, 1983. Finlay Testing violated training requirements specified in the license and in 10 CFR Part 34 as to five licensee employees. The evidence indicates that at least five licensee employees performed work with radiographic equipment without completing one or more of the following training requirements: completion of classroom training; completion of written and field examinations; and receipt from the licensee of required written safety procedures.
- D. The investigation identified numerous instances where the licensee violated several important areas of its radiation safety program. Each of these failures constitutes a violation of Commission requirements. The violations include:
1. Failures to post radiation and high radiation areas.
 2. Failures to provide constant surveillance to prevent unauthorized entry of individuals into restricted areas when radiography was being performed.
 3. Failures to lock radiographic exposure devices.
 4. Failures to secure radiographic exposure devices against unauthorized removal.

5. Use of partially discharged pocket dosimeters for personnel radiation monitoring.

E. The investigation identified numerous instances where the licensee failed to maintain required records.

Specifically, on at least forty occasions during licensed radiographic operations since October 4, 1986, the licensee failed to prepare or to maintain required records that show one or more of the following: (1) the utilization of radiographic sources; (2) the results of exposure device safety inspections; (3) the radiation surveys needed to establish boundaries of restricted areas; (4) radiation surveys performed following the return of radiographic sources to storage; and (5) the readings from pocket dosimeters worn during radiographic operations.

IV

In the attached Notice of Violation, due to the willfulness and deception employed in repeatedly transporting radioactive sources in violation of regulatory requirements, the Severity Level assessed for violations I.A through D has been increased to Severity Level I in accordance with Section III of the "General Statement of Policy and Procedures for NRC Enforcement Action," 10 CFR Part 2, Appendix C (1987). The severity level assessed for violations II.A through X has been increased to Severity Level II in accordance with Section III of the Enforcement Policy Statement, as these violations demonstrate a careless disregard for NRC requirements.

The federal regulations for shipping radioactive material by air have been established, in part, to protect passengers in aircraft and personnel who handle baggage and cargo from receiving radiation exposure from radioactive material. For the safety of handlers and passengers, the regulations require packaging, labeling, surveying, documentation, and storage limitations for carriage of radioactive material, and also limit the types of flights on which the material may be transported. Regulations concerning training of personnel, surveying of sources and work sites, proper security for radioactive sources, and maintenance of records have been promulgated to protect the health and safety of the public, including licensee employees.

The information presented in this Order and in the attached Notice of Violation shows that the violations described in the September 21, 1987 Order were not isolated cases. As detailed in the Notice of Violation, there were at least eight improper shipments by seven licensee employees over an eight month period, demonstrating the licensee's willingness to violate NRC requirements when expedient. Indeed, with regard to more than one shipment, the owner and president of Finlay Testing Laboratories directed the shipping of the radiographic exposure device in violation of federal requirements.

Information currently available to the NRC staff establishes that the licensee was unwilling, over an extended period of time, to comply with the Commission's requirements to protect the public health and safety when compliance with the requirements would delay the transport of the licensed material or be otherwise

Inconvenient. Furthermore, the licensee has demonstrated an unwillingness or an inability to comply with the obligations to protect the public health and safety that must be assumed by those to whom a license is entrusted. This unwillingness or inability to comply is shown by the licensee's violations of requirements to properly survey and to adequately post radiation areas, to properly secure devices when in storage, to use adequately trained and qualified personnel, to properly monitor exposure of employees, to maintain numerous records, and to exercise adequate control of licensed activities. The lengthy list of violations demonstrates a serious breakdown of management control. In sum, the licensee has shown a disregard for NRC requirements and for the public health and safety.

Given the number and nature of violations and the large number of employees involved relative to the total number of employees performing licensed activities, the NRC no longer has reasonable assurance that licensed activities will or can be conducted without undue risk to the public health and safety. If, at the time the license was issued, the NRC had known of the licensee's inability or unwillingness to control licensed activities, the license would not have been issued. Therefore, I have determined that permitting this licensee to conduct licensed activities would be contrary to the public health and safety and that the license should be revoked. I have also determined pursuant to 10 CFR 2.201(c) and 2.202(f), that the public health and safety requires the continued suspension of the license until the revocation issue is resolved, and that no prior notice is required.

VI

Accordingly, in view of the foregoing and pursuant to Sections 81, 161b, 161c, 161d, 161e, 182 and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Section 2.202 and 10 CFR Parts 30 and 34, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT:

Activities under License No. 53-17854-01 shall continue to be suspended.

IT IS FURTHER ORDERED THAT:

The licensee shall show cause, in accordance with Section VII of this Order, why License No. 53-17854-01 should not be revoked.

The Regional Administrator, Region V, may, in writing, relax or rescind any of the above provisions on demonstration of good cause by the licensee.

VII

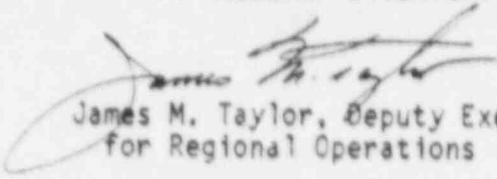
Pursuant to 10 CFR 2.202(b), the licensee may show cause why License No. 53-17854-01 should not be revoked by filing a written answer under oath or affirmation within 20 days of the date of issuance of this Order, setting forth the matters of fact and law on which the licensee relies. The licensee may answer this Order, as provided in 10 CFR 2.202(d), by consenting to the provisions specified in Section VI above. Upon consent of the licensee to the provisions set forth in Section VI of this Order, or on failure of the licensee to file an answer within the specified time, the license shall be revoked without further Order.

VIII

The licensee or any other person adversely affected by this Order may request a hearing within 20 days of this Order. Any answer to this Order and any request for a hearing shall be submitted to the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555. Copies shall also be sent to the Assistant General Counsel for Enforcement, Office of the General Counsel, at the same address, and to the Regional Administrator, U. S. Nuclear Regulatory Commission, Region V, 1450 Maria Lane, Suite 210, Walnut Creek, California 94596. If a person other than the licensee requests a hearing, that person shall set forth with particularity the manner in which the petitioner's interest is adversely affected by this Order and should address the criteria set forth in 10 CFR 2.714(d). An answer to this Order or a request for hearing shall not stay the immediate effectiveness of the continuation of the suspension.

If a hearing is requested by the licensee or a person whose interest is adversely affected, the Commission shall issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at the hearing shall be whether this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Bethesda, Maryland
this 11th day of April 1988.

NOTICE OF VIOLATION

Finlay Testing Laboratories, Inc.
Testing and Inspection Services
Aiea, Hawaii

Docket No. 030-13435
License No. 53-17854-01
EA 88-69

During an NRC inspection and investigation conducted beginning August 31, 1987, and continuing through March 18, 1988, certain violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987), the violations are listed below:

- I. License Condition 15 provides that the licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material".

10 CFR 71.5(a) states that each licensee who transports licensed material outside of the confines of its plant or other place of use, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the regulations of the Department of Transportation in 49 CFR Parts 170 through 189 appropriate to the mode of transport.

10 CFR 71.5(b) provides that for shipments not in interstate or foreign commerce, or for shipments not transported in civil aircraft, the licensee shall conform to the DOT requirements as required by 10 CFR 71.5(a).

- A. 49 CFR 173.448(f) states that no person shall offer for transportation aboard a passenger-carrying aircraft any radioactive material unless that material is intended for use in, or incident to, research, medical diagnosis or treatment.

Contrary to the above:

1. On February 9, 1987, the licensee transported an exposure device containing licensed radioactive material on a passenger aircraft from Honolulu to Hilo, Hawaii for the purpose of conducting radiography.
2. On February 14, 1987, the licensee transported an exposure device containing licensed radioactive material on a passenger aircraft from Hilo to Honolulu, Hawaii.
3. On April 3, 1987, the licensee transported an exposure device containing licensed radioactive material on a passenger aircraft from Honolulu to Hilo, Hawaii for the purpose of conducting radiography.
4. On April 3, 1987, the licensee transported an exposure device containing licensed radioactive material on a passenger aircraft from Hilo to Honolulu, Hawaii.
5. On April 14, 1987, the licensee transported an exposure device containing licensed radioactive material on a passenger aircraft from Honolulu to Hilo, Hawaii for the purpose of conducting radiography.

6. On April 14, 1987, the licensee transported an exposure device containing licensed radioactive material on a passenger aircraft from Hilo to Honolulu, Hawaii.

Each of the above transportation events is a Severity Level I Violation (Supplement V).

- B. 49 CFR 172.200(a) requires that each person who offers a hazardous material for transportation shall describe the hazardous material on a shipping paper in a manner prescribed by Subpart C of 49 CFR Part 172.

49 CFR 172.101 classifies radioactive material as a hazardous material for the purpose of transportation.

Contrary to the above, on six occasions between February 9, 1987 and April 14, 1987, radiographic exposure devices containing licensed radioactive material were transported on commercial aircraft by licensee employees between Honolulu and Hilo, Hawaii, without any shipping papers describing the hazardous material. Also, on January 29, 1987 and August 18, 1987, an exposure device containing licensed material was transported on a non-civil passenger/cargo aircraft by a licensee employee between Johnston Island and Hickam Air Force Base, Hawaii, without any shipping papers describing the hazardous material.

This is a Severity Level I Violation (Supplement V).

- C. 10 CFR 71.12(a) grants a general license to any licensee for transport of licensed material in a package for which a Certificate of Compliance (COC) or other approval has been issued by the NRC.

10 CFR 71.12(c) limits this general license to a licensee who has a copy of the COC and who complies with the terms of the certificate.

The NRC Certificate of Compliance (Certificate No. 9053), issued on November 5, 1985 to Technical Operations, Inc. (Tech/Ops), requires the use of an 18-gauge steel drum protective overpack with a bolted and seal wire clamp closure ring as the acceptable package for the transport of the Tech/Ops Model 683 radiographic exposure device.

Contrary to the above, on February 9 and 14, 1987, the licensee shipped Tech/Ops Model 683 exposure device (serial number 75) inside a duffel bag without the required overpack between Honolulu and Hilo, Hawaii. Also, during 1987, the licensee routinely used a metal strongbox as a shipping container to transport the same Tech/Ops Model 683 exposure device to temporary job sites on the island of Oahu. The metal strongbox does not conform to the COC as an approved overpack for transport of the exposure device.

This is a Severity Level I violation (Supplement V).

- D. 49 CFR 172.403 requires appropriate "Radioactive" category labels that identify the activity and radioactive contents of packages

containing radioactive material. Determination of the proper label is based on the radiation dose rates at the surface and at one meter (transport index) from the package.

Contrary to the above, on eight occasions between January 29, 1987 and August 18, 1987, radiographic exposure devices containing licensed material were transported in containers between Honolulu and Hilo, Hawaii, and between Johnston Island and Hickam Air Force Base, Hawaii, without any "Radioactive" category labels.

This is a Severity Level I Violation (Supplement V).

- II. A. 10 CFR 34.31(b)(1) provides that the licensee shall not permit any individual to act as a radiographer's assistant until the individual has received copies of and instruction in the licensee's operating and emergency procedures.

License Condition 11 provides that licensed material shall be used by, or under the supervision of, Gordon Finlay or individuals who have completed the training program described in the letter dated February 28, 1983 with attached revised application, and letter dated August 2, 1983 with attachments. The "Training Program for Radiography Personnel", attached to the letter of August 2, 1983, requires that an individual receive twenty-four hours of initial classroom training before being allowed to work as an assistant radiographer.

Contrary to the above, the licensee violated these training requirements on several occasions:

1. On April 3, 1987 at Kilauea Military Camp, Hawaii, and on previous occasions at other job sites, a licensee employee worked as an assistant radiographer for the licensee without receiving any prior classroom training.
 2. During the period of February 9-13, 1987, a second licensee employee worked as an assistant radiographer for the licensee near Honokaa, Hawaii, even though he had not received a copy of or instruction in the licensee's operating and emergency procedures.
 3. During the period of June-July, 1987, a third licensee employee worked as an assistant radiographer for the licensee on Johnston Island without having completed any classroom training.
- B. 10 CFR 34.31(a)(1),(2) requires that the licensee not permit any individual to act as a radiographer until the individual has been instructed in the subjects outlined in Appendix A of 10 CFR Part 34, and has received copies of and instruction in 10 CFR Parts 19, 20, and 34, the NRC license, and the licensee's operating and emergency procedures.

License Condition 11 provides that licensed material shall be used only by, or under the supervision of, Gordon Finlay or individuals who have completed the training program described in the letter dated February 28, 1983 with attached revised application, and letter dated August 2, 1983 with attachments. The "Training Program for Radiography Personnel", which was attached to the letter of August 2, 1983, requires that an individual receive sixteen hours of classroom training and instruction in the use of radiographic exposure devices and the licensee's operating and emergency procedures. The licensee's training program also requires six months of on-the-job training as a radiographer's assistant before an individual is allowed to work as a radiographer.

Contrary to the above, two individuals had acted as radiographers on several occasions without completing all training requirements as follows:

1. During the period of May 14-21, 1987 at Campbell Industrial Park, Oahu, a licensee employee worked as a radiographer for the licensee without receiving any classroom training or instruction in the applicable NRC regulations, and without completing six months of prior on-the-job training as a radiographer's assistant.
 2. During the periods of July 6-13, 1987 and August 18-22, 1987, a second licensee employee worked as a radiographer for the licensee on Johnston Island without receiving classroom training or copies of the licensee's operating and emergency procedures.
- C. 10 CFR 34.31(b)(3) requires that a licensee not permit any individual to act as a radiographer's assistant until that individual has demonstrated an understanding of the licensee's operating and emergency procedures and the ability to work under the personal supervision of a radiographer by successfully completing a written or oral examination and field examination.

License Condition 11 provides that licensed material shall be used only by, or under the supervision of, Gordon Finlay or individuals who have completed the training program described in the letter dated February 28, 1983 with attached revised application, and letter dated August 2, 1983 with attachments. The "Training Program for Radiography Personnel", which was attached to the letter of August 2, 1983, requires that previously experienced radiographers and radiographers' assistants provide evidence of qualification under an NRC license and satisfactorily complete the written examination given to new radiographers or assistant radiographers as appropriate.

Contrary to the above, three individuals had acted as assistant radiographers on several occasions without completing all examination requirements as follows:

1. On April 3, 1987, a licensee employee acted as an assistant radiographer for the licensee, but did not complete the written examination until May 1, 1987.
 2. During the period of February 9-13, 1987, a second licensee employee, with prior radiography experience, acted as an assistant radiographer for the licensee without providing evidence of qualification under an NRC license and without completing a written examination.
 3. During the period of June-July, 1987, a third licensee employee acted as an assistant radiographer for the licensee without completing a written examination.
- D. 10 CFR 34.31(a)(4) requires that a licensee not permit an individual to act as a radiographer until that individual has demonstrated an understanding of the licensee's operating and emergency procedures, of 10 CFR Parts 19, 20 and 34, and of the NRC license under which the radiographer will perform radiography. This knowledge is to be demonstrated by the successful completion of a written test and field examination.

Contrary to the above, two individuals had acted as radiographers without completing all examination requirements as follows:

1. During the period of May 14-21, 1987, a licensee employee acted as a radiographer at Campbell Industrial Park, Oahu, without having completed the licensee's written and field examinations for qualification as a radiographer.
 2. On at least three occasions during the period of 1985-1986, a second licensee employee acted as a radiographer, without completing the licensee's written and field examinations for qualification as a radiographer.
- E. 10 CFR 34.44 requires that whenever a radiographer's assistant uses radiographic exposure devices and related equipment, or conducts radiation surveys during licensed radiography, the assistant must be under the personal supervision of a radiographer. The personal supervision must include the radiographer's personal presence at the jobsite, the radiographer's ability to give immediate assistance, and the radiographer observing the assistant's performance of radiographic operations.

Contrary to the above, an assistant radiographer of the licensee operated radiographic exposure devices and conducted radiation surveys without the personal supervision of a radiographer on several occasions during the period of May 14-21, 1987 at Campbell Industrial Park, Oahu.

- F. 10 CFR 34.41 requires the radiographer or radiographer's assistant to maintain direct surveillance of the operation to protect against unauthorized entry into a high radiation area during each radiographic operation.

Contrary to the above, licensee radiographers did not maintain direct surveillance over the operation to prevent unauthorized entry into the high radiation area during radiographic operations on or about July 13, 1987 and August 18, 1987 on Johnston Island.

- G. 10 CFR 20.201(b) requires the licensee to make surveys as necessary to evaluate the extent of radiation hazards that may be present and to assure compliance with 10 CFR Part 20.

Contrary to the above, a survey was not performed to determine the radiation levels external to the radiographic exposure device containing licensed material, prior to its shipment on January 29, 1987 on a passenger/cargo aircraft between Johnston Island and Hickam Air Force Base, Hawaii.

- H. 10 CFR 34.22(a) requires licensee personnel to lock each radiographic exposure device or to lock the device in its container when not under the direct surveillance of a radiographer or radiographer's assistant.

Contrary to the above, the licensee's Tech/Ops Model 660 radiographic exposure device and its container were unlocked and not under the surveillance of a radiographer or radiographer's assistant during the storage of the device and container on August 26, 1987 inside the bunker facility (Building 737) on Johnston Island.

- I. 10 CFR 20.207(a) requires that licensed materials stored in an unrestricted area be secured against removal from the place of storage. As defined in 10 CFR 20.3(a)(17), an unrestricted area is any area to which access is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above, on at least one occasion during July and August, 1987, two radiographic exposure devices being stored in an unrestricted area (licensee's bunker, Building 737) on Johnston Island, were not secured against unauthorized removal, in that the door to the bunker storage cage containing the exposure devices was unlocked.

- J. 10 CFR 34.33(a) requires radiographers and radiographers' assistants to wear direct reading pocket dosimeters at all times during radiographic operations, and also requires that the pocket dosimeters be recharged at the start of each work shift.

1. Contrary to the above, a licensee employee did not wear a pocket dosimeter while working as an assistant radiographer during the period of February 9-13, 1987 at the "Big Island Meat" jobsite near Honokaa, Hawaii.

2. Contrary to the above requirements, the pocket dosimeter (serial number A4060) worn by a licensee radiographer was not recharged prior to its use for personnel monitoring at the start of the work shift during radiographic operations on August 31, 1987 at Campbell Industrial Park, Oahu.

- K. 10 CFR 34.33(c) requires pocket dosimeters to be checked at periods not to exceed one year for correct response to radiation.

Contrary to the above, a pocket dosimeter (serial number 41248974) worn by licensee personnel on fifteen different occasions during radiographic operations in 1986-1987 had not been checked for proper response to radiation between May 2, 1984 and April 30, 1987, a period exceeding one year.

- L. 10 CFR 34.33(e) requires that records of the readings from pocket dosimeters which are worn by radiographers and assistant radiographers, be kept by the licensee for two years.

Contrary to the above, as of September 1, 1987, records had not been kept of the pocket dosimeter readings resulting from thirty-seven separate radiographic operations conducted during the period between October 4, 1986 and August 25, 1987, at job sites on Johnston Island and the islands of Maui, Oahu, and Hawaii.

- M. 10 CFR 34.11(d)(1) requires the licensee to have an inspection program which will audit the performance of each radiographer and radiographer's assistant during an actual radiographic operation at intervals not to exceed three months.

Contrary to the above, a licensee employee who had worked as a radiographer on fifty-two days during the period between July 1, 1987 and September 8, 1987 on Johnston Island, had not been audited since April 1, 1987, a period exceeding three months. This violation is also repetitive from the last NRC inspection of July 29-30, 1986.

- N. 10 CFR 34.11(d)(3) requires the licensee to maintain for three years the records of performance inspections of radiographers or radiographers' assistants which are made to comply with 10 CFR 34.11(d)(1).

Contrary to the above, as of September 1, 1987, the licensee had not maintained performance inspection records for a radiographer employee since the previous inspection on April 1, 1987.

- O. 10 CFR 34.27 requires that the licensee maintain logs, which are to be kept available for two years from the date of each radiographic operation, which identify: the exposure device used, the responsible radiographer, and the plant or site where used and dates of use.

Contrary to the above, as of September 1, 1987, the licensee had failed to maintain utilization logs of forty-seven separate radiographic operations performed between October 4, 1986 and August 25, 1987, at temporary job sites on Johnston Island and the islands of Maui, Oahu, and Hawaii.

- P. 10 CFR 34.42 requires the licensee to conspicuously post areas in which radiographic operations are being performed in accordance with the requirements of 10 CFR 20.203(b) and (c)(1).

1. 10 CFR 20.203(b) provides that each radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: "Caution Radiation Area".

License Condition 16 requires that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the attachment to the letter dated August 2, 1983. Procedure 3.a. of the attachment requires that the licensee post sufficient "Caution Radiation Area" signs to cover all access points into the restricted area during radiographic operations.

Contrary to the above, "Caution Radiation Area" signs were not posted by the licensee during radiographic operations on April 3 and 14, 1987 at Kilauea Military Camp, Hawaii, or at all entrances into the restricted area during radiographic operations on August 18, 1987 on Johnston Island.

2. 10 CFR 20.203(c)(1) provides that each high radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: "Caution High Radiation Area".

Contrary to the above, "Caution High Radiation Area" signs were not posted during the following periods at the following radiography job sites:

| | |
|-------------------------|--------------------------------|
| (1) April 3, 1987 | Kilauea Military Camp, Hawaii |
| (2) February 9-13, 1987 | Big Island Meat Plant, Hawaii |
| (3) May 14-15, 1987 | Campbell Industrial Park, Oahu |
| (4) May 19-21, 1987 | Campbell Industrial Park, Oahu |
| (5) July 6-12, 1987 | Johnston Island |
| (6) August 18-22, 1987 | Johnston Island |

- Q. 10 CFR 20.401(b) requires the licensee to maintain records showing the results of surveys required by 10 CFR 20.201(b), and the monitoring requirements of 10 CFR 20.205(c).

License Condition 16 requires that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the attachment to the letter dated August 2, 1983. The operating and emergency procedures in the above attachment require that the results of radiation surveys of vehicles transporting licensed material be recorded using the form: "Radiation Survey Log".

1. Contrary to the above, as of September 1, 1987, the licensee had not maintained records of radiation surveys of unrestricted areas required by 10 CFR 20.201(b) on forty-seven separate

occasions between October 4, 1986 and August 25, 1987, at temporary job sites on Johnston Island and the islands of Maui, Oahu, and Hawaii.

2. Contrary to the above, as of September 1, 1987, the licensee had not maintained records of radiation surveys of shipping packages containing exposure devices required by 10 CFR 20.201(b) prior to their transport on February 9 and 14, 1987, and April 3 and 14, 1987, between Honolulu and Hilo, Hawaii.
3. Contrary to the above, as of September 1, 1987, the licensee had not maintained records of package radiati. surveys required by 10 CFR 20.205(c) following the commercial transport and receipt of special form sources exceeding twenty curies within exposure devices for the following dates and locations:

| | |
|-----------------------|------------------|
| (1) February 9, 1987 | Hilo, Hawaii |
| (2) February 14, 1987 | Honolulu, Oahu |
| (3) April 3, 1987 | Hilo, Hawaii |
| (4) April 3, 1987 | Honolulu, Oahu |
| (5) April 14, 1987 | Hilo, Hawaii |
| (6) April 14, 1987 | Honolulu, Hawaii |
| (7) August 18, 1987 | Johnston Island |
4. Contrary to the above, as of September 1, 1987, the licensee had not maintained records of radiation surveys of vehicles used for transporting licensed material in radiographic exposure devices on thirty-one occasions between October 4, 1986 and August 25, 1987.

- R. 10 CFR 34.43(d) requires each licensee to retain for three years the records of storage surveys of radiographic exposure devices which are made pursuant to 10 CFR 34.43(c), when the storage survey is the last one performed in the work day.

Contrary to the above, as of September 1, 1987, the licensee failed to maintain records of the final storage surveys on thirty-seven separate occasions following the use of exposure devices between October 4, 1986 and August 25, 1987, on Johnston Island and the islands of Maui, Oahu, and Hawaii.

- S. License Condition 16 requires that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below:

- A. Application dated December 5, 1982
- B. Letter dated February 28, 1983
- C. Letter dated August 2, 1983

Procedure 10.a. and 10.c. of the enclosure to the letter dated August 2, 1983 requires the licensee to document the results of the daily inspection of exposure devices using the check list form: "Daily Inspection of Radiographic Exposure Devices and Storage

Containers". Procedure 9.a. of the same enclosure requires the licensee to maintain records of the daily inspections.

Contrary to the above, as of September 1, 1987, the licensee had not maintained records of the daily inspections of exposure devices that were used on fifty-five separate occasions during the period October 4, 1986 through August 25, 1987, on Johnston Island and the islands of Maui, Oahu, and Hawaii.

- T. 10 CFR 20.401(a) requires each licensee to maintain records showing the radiation exposure of all individuals for whom personnel monitoring is required under 10 CFR 20.202. These records shall be kept on Form NRC-5, in accordance with the instructions contained on that form or on clear and legible records containing all the information required by Form NRC-5.

Contrary to the above, as of September 1, 1987, the licensee had not maintained records showing the radiation exposure of an assistant radiographer who had worn a whole body badge, or licensee employees who had been issued spare whole body badges, between October 1, 1986 and March 31, 1987.

- U. 10 CFR 19.13(c) requires each licensee, on the request of a worker formerly engaged in licensed activities controlled by the licensee, to furnish to the worker a report of the worker's exposure to radiation or radioactive material. The licensee shall furnish the report within thirty days after the request is made or the exposure of the individual is determined.

Contrary to the above, as of September 2, 1987, an individual who terminated employment with the licensee during April, 1987 and at the same time requested a report of radiation exposure incurred during the period of employment with the licensee, had not received the report.

- V. 10 CFR 20.408(b) provides that when an individual terminates employment with a licensee who uses byproduct material for purposes of radiography, the licensee shall furnish to the NRC a report of the individual's exposures to radiation and radioactive material, incurred during the period of employment or work assignment in the licensee's facility. The report shall be furnished within thirty days after the licensee has determined the exposure of the individual or ninety days after the date of termination of employment, whichever is earlier.

Contrary to the above, as of September 2, 1987, the licensee had not submitted to the NRC a report of the radiation exposure received by one individual working as an assistant radiographer who terminated employment with the licensee during April, 1987.

- W. 10 CFR 34.31(c) requires the licensee to maintain, for three years, records of training of radiographers and assistant radiographers, including copies of written tests and dates of oral tests and field examinations.

Contrary to the above, as of September 1, 1987, the licensee had not maintained a copy of the written examination which was administered to a trainee radiographer on August 4, 1986.

- X. 10 CFR 19.11(a) states, in part, that each licensee shall post current copies of the license, license conditions, or documents incorporated into a license by reference, and amendments thereto. 10 CFR 19.11(b) also states that if posting of a document specified above is not practicable, the licensee may post a notice which describes the document and states where it may be examined.

10 CFR 19.11(d) states that the licensee shall conspicuously post the documents referenced by 10 CFR 19.11(a) in a sufficient number of places to permit individuals engaged in licensed activities to observe them on the way to or from any licensed activity location to which the document applies.

Contrary to the above, on August 26, 1987 at the licensee's bunker (Building 737) on Johnston Island, the above documents were neither posted nor was there a notice which describes the documents and states where they may be examined.

Collectively, Violations II.A through X have been evaluated in the aggregate as a Severity Level II violation (Supplements IV, V, and VI).

Dated at Bethesda, Maryland
this //th day of April 1988.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Robert M. Lazo, Chairman
Glenn O. Bright
Richard F. Cole

In the Matter of

FINLAY TESTING LABORATORIES, INC.

Docket Nos. 30-13435-SC-1
30-13435-SC-2

ASLBP Nos. 88-559-01-SC
88-572-02-SC

May 23, 1988

ORDER APPROVING SETTLEMENT AGREEMENT
AND TERMINATING PROCEEDING

On May 13, 1988, the parties to this enforcement proceeding, the NRC Staff and Finlay Testing Laboratories, Inc. (Licensee), filed with the Atomic Safety and Licensing Board (1) a Settlement Agreement that had been accepted by both parties and was in the process of being signed and (2) a joint motion requesting the Board's approval of the Agreement and the entry of an order terminating this proceeding with a proposed Order. A fully executed copy of the Settlement Agreement was received by the Licensing Board on May 20, 1988. The Board has reviewed the Agreement under 10 C.F.R. § 2.203 to determine whether approval of the Agreement and consequent termination of this proceeding is in the public interest. Based upon its review, the Board is satisfied that approval of the Settlement Agreement and termination of this proceeding based thereon is in the public interest.

Accordingly, the Board approves the Settlement Agreement attached hereto and incorporated by reference into this Order. Pursuant to §§ 81, 161(b), 161(c), 161(f) and 161(o) of the Atomic Energy Act of 1954, as amended (42 U.S.C. §§ 2111 and 2201(b), (c), (i) and (o)) and 10 C.F.R. § 2.203, the Board hereby terminates this proceeding on the basis of the Settlement Agreement.

THE ATOMIC SAFETY AND LICENSING BOARD

Robert M. Lazo

Robert M. Lazo, Chairman
ADMINISTRATIVE JUDGE

Glenn O. Bright

Glenn O. Bright
ADMINISTRATIVE JUDGE

Richard F. Cole

Richard F. Cole
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland,
this 23rd day of May 1988.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

| | | |
|------------------------------|---|----------------------------|
| In the Matter of |) | Byproduct Material License |
| |) | No. 53-17854-01 |
| FINLAY TESTING LABORATORIES, |) | Docket No. 30-13435 |
| INC. |) | EA-87-186 |
| |) | ASLBP No. 88-559-01-SC |

SETTLEMENT AGREEMENT

On September 21, 1987, the Nuclear Regulatory Commission (NRC) Staff issued an Order, effective immediately, that suspended the byproduct material license of Finlay Testing Laboratories, Inc. (the Licensee) pending further investigation of the Licensee. The Licensee requested a hearing on that suspension and the matter was referred to this Atomic Safety and Licensing Board. The further investigation was conducted and, as a result of that investigation, on April 11, 1988, the Staff issued an Order Continuing Suspension of License (Effective Immediately) and Order to Show Cause Why the License Should Not be Revoked (Revocation Order). Licensee responded with a request for hearing on the Revocation Order. The NRC staff and Gordon W. Finlay, individually and as owner and president of the Licensee, hereby agree as follows:

1. In response to the Revocation Order, the Licensee withdraws its request for a hearing dated May 2, 1988, and agrees to a termination of License No. 53-17854-01. Termination of this license is subject to compliance with 10 C.F.R. 30.36(d). Licensee agrees to submit all

information required by Section 30.36(d) and to transfer all licensed material to an authorized recipient within 30 days of this agreement. All other activities under License No. 53-17854-01 shall remain suspended until the license has been terminated.

2. The Licensee and Gordon W. Finlay deny the findings made in the Revocation Order and accompanying Notice of Violation, not otherwise admitted in the answers of October 5, 1987 and May 2, 1988. However, both the Licensee and Gordon W. Finlay agree not to deny the findings in the Revocation Order and Notice of Violation should the findings be used in considering any future application by the Licensee or Gordon W. Finlay for an NRC or Agreement State materials license or in any other NRC or Agreement State materials licensing or civil enforcement proceeding which may be brought in the future in which the Licensee or Gordon W. Finlay may be adversely affected. These findings may be accepted as evidence in any such future proceeding, provided however, that the Licensee or Gordon W. Finlay shall not be precluded from offering evidence of explanation, mitigation or changed circumstances.

3. For a period of three years from September 21, 1987 (until September 20, 1990) the Licensee agrees not to apply to the NRC or to any Agreement State for a new license under the present or any assumed corporate name and Gordon W. Finlay agrees not to apply for such a license on his own behalf or on behalf of any entity which he owns or controls during that same period.

4. For a period of three years from September 21, 1987 (until September 20, 1990) Gordon W. Finlay agrees that he will not perform the duties of a radiographer or a supervisor of radiographers. For that same period he further agrees that he will provide prior written notice to the NRC or any Agreement State with applicable regulatory authority before performing any other duties related to licensed activity, for example, serving as a controlling officer of a licensee or as an assistant radiographer. The notice is to be provided in writing to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 or the applicable Agreement State, ten working days prior to commencement of the activity.

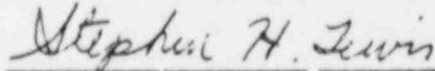
5. The Licensee and Gordon W. Finlay agree to notice dismissal with prejudice of the action pending in the United States District Court for the District of Hawaii, Finlay Testing Laboratories, Inc. vs. U.S. Nuclear Regulatory Commission, et al., Civil No. 88-00276 VAC.

6. The NRC staff agrees that it will not seek civil penalties against the Licensee or Gordon W. Finlay for violations asserted in the Notice of Violation accompanying the Revocation Order.

7. The NRC staff and the Licensee shall jointly move the Atomic Safety and Licensing Board for an Order approving this settlement agreement


and terminating this proceeding. This agreement shall become effective upon the Board approval.

FOR THE NUCLEAR REGULATORY COMMISSION



Stephen H. Lewis, Esq.
Senior Supervisory Trial Attorney
Dated this 13th day of May, 1988

FOR GORDON W. FINLAY AND FINLAY TESTING
LABORATORIES, INC.:


Barry D. Edwards, Esq.
Dated this 16th day of May, 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

NOV 06 1987

Docket No. 030-06579
License No. 45-08890-01
EA 87-128

Froehling & Robertson, Inc.,
ATTN: Mr. V. Briody
Vice President and Radiation
Safety Officer
Post Office Box 27524
3015 Dumbarton Road
Richmond, Virginia 23228

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT NO. 45-08890-01/87-01)

This refers to the inspections conducted at Froehling & Robertson, Inc., Richmond, Virginia, on June 18 and July 13, 1987. The inspections included a review of activities conducted with respect to radiation safety. As a result of these inspections, significant failures to comply with NRC regulatory requirements, including conditions of your license, were identified. NRC concerns relative to the inspection findings were discussed in an Enforcement Conference held at your facility on July 15, 1987. The report documenting these inspections and the Enforcement Conference was sent to you by letter dated August 11, 1987.

In your responses to the Inspection Report dated September 14, 1987 (including the attached letter dated September 3, 1987) and September 18, 1987, you denied that the apparent violations occurred as stated in paragraphs 7.a, 7.b, 8.b, and 12 of the Inspection Report. After consideration of your responses, including the evaluation of new information submitted to our Office after the NRC inspections of June 18 and July 13, 1987, we have concluded that apparent violations detailed in Inspection Report paragraphs 7.b and 12 will not be cited. Additionally, based on information detailed in the Inspection Report and on the supplemental information you provided, we have concluded that apparent violations detailed in Inspection Report paragraphs 7.a., as modified, and 8.b are being cited. Also, based on further review of records you submitted (also obtained during the July 13, 1987 inspection), we have added violation C.1 which was not previously included in Inspection Report No. 45-00890-01/87-01.

The violations described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty involve failures to (1) conduct surveys in order to comply with radiation dose limits for employees, (2) re-evaluate the overall Radiological Safety Program at least once per quarter in order to ensure that all areas are sufficient for the safe and efficient control of both personnel and material, (3) maintain records of periodic or refresher training, (4) record a survey of the radiographic exposure device after the last exposure at the

NOV 06 1987

radiographic site and after the radiographic exposure device was placed in a storage area, (5) record a survey of the radiographic exposure device when the device was removed from storage for use after the last exposure at the radiographic site and after the device was placed back in storage, (6) record a survey of the radiography vehicle's exterior surface and passenger compartment once the radiographic exposure device was placed in the radiographic vehicle for transport, (7) record a sketch of radiographic operations on the utilization record, (8) record the serial number and calibration date of the survey meter used during radiographic operations on the utilization record, (9) record the radiographer and/or assistant radiographer who performed the radiographic operations on the utilization records, (10) determine the applicable Transportation Index when shipping radioactive packages, (11) record the activity of sources when shipping radioactive material, (12) post required documents or a notice describing the documents and stating where they may be examined, and (13) post a Notice of Violation and any response. These violations demonstrate the need for improvements in the administration and control of your Radiological Safety Program to ensure the safe performance of licensed activities and adherence to NRC requirements.

To emphasize the need for adequate management control over your Radiological Safety Program, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Five Thousand Dollars (\$5,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violations described in the enclosed Notice have been categorized in the aggregate as a Severity Level III problem. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustment of the base civil penalty amount has been deemed appropriate.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. Violation A described in the enclosed Notice is of significant concern because the failure to make an evaluation to determine the radiation doses to individuals may have resulted in these individuals receiving doses in excess of the radiation dose limits set forth in 10 CFR Part 20. Please give particular attention in your response to the identification of the root cause of this problem and your corrective action to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

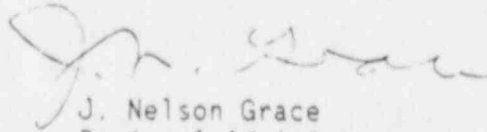
Froehling & Robertson, Inc.

- 3 -

NOV 06 1987

Should you have any questions concerning this letter, please contact us.

Sincerely,



J. Nelson Grace
Regional Administrator

Enclosure:
Notice of Violation and
Proposed Imposition
of Civil Penalty

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Froehling & Robertson, Inc
Richmond, Virginia

Docket No. 030-06579
License Nos. 45-08890-01
EA 87-128

During Nuclear Regulatory Commission (NRC) inspections conducted on June 18 and July 13, 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 penalty are set forth below:

- A. 10 CFR 20.201(b) requires, in part, a licensee to make such surveys as may be necessary to comply with the regulations in 10 CFR Part 20. A "survey" is defined in 10 CFR 20.201(a) as an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of circumstances.

10 CFR 20.101 specifies radiation dose standards for individuals in restricted areas.

License Condition 16 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in documents including its license application dated May 28, 1986 and letter dated July 15, 1986, including any enclosures.

Section 5.3.1.5 of the license application requires, in part, that the licensee issue film badges for periods of two weeks or one month. At the end of the effective period, new badges are to be duly assigned. The old badge must then be returned to the Radiation Safety Officer (RSO) or his representative for transmittal to the health physics agency utilized for film badge measurements.

Contrary to the above, the licensee did not conduct such surveys as were necessary to determine the radiation doses of three employees located at the Richmond Branch location for the period between September 25, 1986 and January 15, 1987. The film badges worn by the three employees were not returned to the film badge vendor in a timely manner, and therefore the film badge vendor could not process the three employee's film badges due to the aging effects on the film from the delay in submitting the film badges. Also, the licensee did not conduct such surveys as were necessary to determine the radiation doses of six employees located at the Richmond Branch location for the period between January 15, 1986 and April 18, 1986. In this case, the film badges were not submitted to the film badge vendor for processing on a monthly frequency as specified in Section 5.3.1.5 of the license application. In neither case was a further evaluation made nor was an appropriate estimated radiation dose assigned to these individuals for these periods.

- B. License Condition 16 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in documents including its license application dated May 28, 1986 and letter dated July 15, 1986, including any enclosures.
1. Section 14.6 of the license application requires the Primary Radiation Safety Officer (RSO), at least once per quarter, to evaluate the overall Radiological Safety Program in order to ensure that all areas are sufficient for the safe and efficient control of both personnel and material.

Contrary to the above, between June 18, 1984 and June 18, 1987, the Primary RSO did not evaluate the overall Radiological Safety Program.

2. Section 1.0 of the license application requires the licensee to maintain an efficient administrative control program over the use of radioactive material as authorized by the United States Nuclear Regulatory Commission and/or Agreement State License. Key personnel must be designated and accorded responsibilities pertinent to the safety and control of personnel relative to training, assignments, specific duties, and radiation exposure. These key personnel shall also be responsible for maintaining complete records concerning all license activity as to usage and storage of the licensed byproduct material, all personnel records, inspection of facilities, etc.

Section 13.9 of the license application requires the licensee to maintain a record of individual training and testing (Form 609: Training Report) to be completed for each training (initial, periodic, refresher) by the Instructor and/or Examiner.

Appendix D, "Administrative Control and Radiological Protection Procedures" of the license application includes a copy of Form 609 titled "Training Report" which designates a category for recording periodic and refresher training.

Section 14.3.2.2 of the license application requires the licensee to administer periodic or refresher training at least once annually.

Contrary to the above, between March 5, 1985 and June 18, 1987, the licensee did not maintain records of periodic or refresher training (Form 609) of a radiographer at the Roanoke Branch.

3. Section 4.7 of the license application requires the licensee to record and maintain, in the form of utilization records (Form 605), complete records of all radiographic operations. This should include a sketch of the area and show placement of the source, signs, ropes, etc. The report should also contain all pertinent information concerning by-product material, survey meters, location and date(s) of operation, radiographic personnel involved, etc.

Contrary to the above:

- a. On May 19, May 21, June 3, June 4, June 14, and June 16, 1987, at the Richmond Branch operations, the licensee did not maintain a complete record of radiographic operations in that it did not record a survey of the iridium-192 radiographic exposure device (Gamma Century Model SA, Serial Nos. 2171 and 1874) after the last exposure at the radiographic site and after the radiographic exposure device was placed in a storage area.
 - b. On June 9, 1987, at the Roanoke Branch operation, the licensee did not maintain a complete record of radiographic operations in that it did not record a survey of the iridium-192 radiographic exposure device (Model 520, Serial No. 720) when the device was removed from storage for use after the last exposure at the radiography site and after the radiographic exposure device was placed back in a storage area.
 - c. On June 9, 1987, at the Roanoke Branch operation, the licensee did not maintain a complete record of radiographic operations in that it did not record a survey of the radiography vehicle's exterior surface or passenger compartment once the radiographic exposure device was placed in the radiography vehicle for transport.
 - d. On June 9, 1987, a licensee's radiographer of the Roanoke Branch operation did not record a sketch of radiographic operations at a radiography site in Blacksburg, Virginia on the utilization record.
 - e. On January 7 and May 19, 1987, the licensee's Richmond Branch operation did not record on the utilization record the serial number and calibration date of the survey meter used during the radiographic operations.
 - f. On April 28, May 7, May 19, May 21, and June 14, 1987, the licensee's Richmond Branch operation did not record, on the utilization record (Form 605), the radiographer and/or assistant radiographer who performed the radiographic operations.
- C. 10 CFR 71.5(a) requires that each licensee who transports licensed material outside of the confine of its plant or other place of use, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the DOT regulations in 49 CFR Parts 170 through 189 appropriate to the mode of transport.
- 49 CFR 172.200(a) requires that each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper in the manner required by this subpart.
1. 49 CFR 172.203(d)(1)(iii) requires the licensee's description for a shipment of radioactive material to include the activity contained in each package of the shipment in terms of curies, millicuries, or microcuries.

Contrary to the above, the licensee did not include, on shipping papers, the activity of iridium-192 sources (Radioactive Materials N.O.S. NA 9182 UN 2974, Special Form Type B) shipped from the Richmond Branch on April 28 and June 14, 1987.

2. 49 CFR 172.203(d)(1)(v) requires the licensee's description for each shipment of radioactive material to include the transport index assigned to each package in the shipment bearing Radioactive Yellow-II or Radioactive Yellow-III labels.

License Condition 16 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in documents including its license application dated May 28, 1986 and letter dated July 15, 1986, including any enclosures.

Section 7.2.2.1.d of the license application requires the licensee to determine the Transportation Index on the shipping papers when shipping radioactive packages.

Contrary to the above, between January 6, 1986 and June 4, 1987, the licensee shipped 51 radiographic exposure devices containing between 5 and 100 curies of iridium-192 from the Roanoke Branch operation to various radiography sites without determining the Transportation Index on the shipping papers. Also, between August 28 and November 24, 1986, the licensee shipped 35 radiographic exposure devices containing between 5 and 100 curies of iridium-192 from the Richmond Branch operation to various radiography sites without determining the Transportation Index on the shipping papers.

- D. 10 CFR 19.11 requires a licensee to post current copies of certain documents in a sufficient number of places to permit individuals engaged in licensed activities to observe the documents on their way to or from the particular licensed activity location to which the documents apply. These documents include 10 CFR Part 19, 10 CFR Part 20, the license, license conditions and amendments thereto, and documents incorporated into the license by reference, and operating procedures applicable to licensed activities. If posting of these documents is not practicable, the licensee may post a notice that describes the documents and states where they may be examined.

Contrary to the above, on June 18, 1987, the licensee had posted neither copies of the required documents nor a notice that described these documents and stated where they might be examined.

- E. 10 CFR 19.11(a)(4) requires the licensee to post any Notice of Violation involving radiological working conditions and any response from the licensee.

Contrary to the above, as of June 18, 1987, neither the Notice of Violation issued on July 7, 1986 nor any response from the licensee was ever posted.

Collectively, these violations have been categorized as a Severity Level III problem (Supplements V and VI).

Cumulative civil penalty - \$5,000 assessed equally among the violations.

Pursuant to the provisions of 10 CFR 2.201, Froehling & Robertson, Inc. (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 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 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 penalty by letter 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 amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty 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 penalty will be issued. Should the licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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.

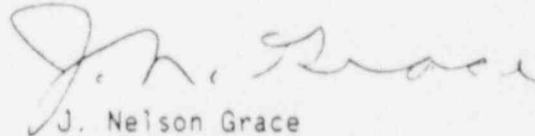
Upon failure to pay any civil penalty due which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to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

Notice of Violation

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The responses to the Director, Office of Enforcement, noted above (Reply to a Notice of Violation, letter with payment of civil penalty, 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, DC 20555, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II.

FOR THE NUCLEAR REGULATORY COMMISSION



J. Nelson Grace
Regional Administrator

Dated at Atlanta, Georgia
this 6 day of November 1987



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 05 1988

Docket No. 030-06579
License Nos. 45-08890-01 and
45-08890-02
EA 87-128

Froehling & Robertson, Inc.
ATTN: Mr. J. Thompson
President
Post Office Box 27524
3015 Dumbarton Road
Richmond, Virginia 23228

Gentlemen:

SUBJECT: ORDER IMPOSING A CIVIL MONETARY PENALTY

This refers to your letters dated December 1, 1987, in response to the Notice of Violation and Proposed Imposition of Civil Penalty (NRC Inspection Report No. 45-08890-01/87-01) sent to you by our letter dated November 6, 1987. Our letter and Notice described thirteen violations identified as a result of an NRC inspection. To emphasize the need for adequate management control of the Radiation Safety Program, a civil penalty of Five Thousand Dollars (\$5,000) was proposed.

In your responses dated December 1, 1987, you admitted that the violations occurred. However, you presented new information regarding violations A, B.1, B.3.b, B.3.c., B.3.d, B.3.e, and C.1. You also requested that the proposed civil penalty be mitigated based on your prior good performance, corrective action, and the absence of repetitive violations.

After consideration of your responses to the Notice of Violation and Proposed Imposition of Civil Penalty, we have concluded, for the reasons given in the Appendix to the enclosed Order Imposing Civil Monetary Penalty, that violations B.3.c and B.3.e will be withdrawn in their entirety, and that portions of violation B.3.b and C.1 will be withdrawn. However, we have determined that the remaining portions of violations B.3.h and C.1 and the remaining violations occurred as stated in the November 6, 1987, Notice; and that an adequate basis has not been provided for complete mitigation of the proposed civil penalty amount. Because violations B.3.c and B.3.e have been withdrawn in their entirety and because the proposed civil penalty amount was assessed equally among the violations, the proposed civil penalty amount has been reduced by approximately 2/13ths or 16 percent (\$800). Accordingly, we hereby serve the enclosed Order on Froehling & Robertson, Inc. imposing a civil penalty in the amount of Four Thousand Two Hundred Dollars (\$4,200).

As a matter of record, it should be noted that up until the July 7, 1986 inspection, prior inspection indicated that your compliance with NRC requirements was adequate. The deterioration in your radiation safety program was noted

Froehring & Robertson, Inc.

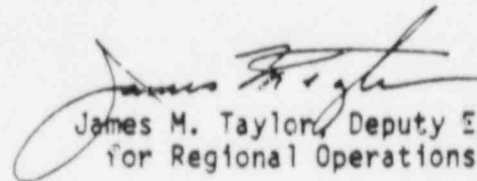
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following the promotion of your Radiation Safety Officer to a higher level position within your organization. This deterioration is an indication that as a result of the higher level duties, this individual was not able to devote sufficient time to the oversight of the radiation safety program.

In view of our enforcement actions, it is imperative that you take prompt action to ensure adequate management oversight of your radiation safety program. We will review the effectiveness of your corrective actions during a subsequent inspection.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

Sincerely,



James M. Taylor, Deputy Executive Director
for Regional Operations

Enclosure:
Order Imposing Civil Monetary
Penalty with Appendix

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the matter of
FROEHLING & ROBERTSON, INC.
Richmond, Virginia

Docket No. 030-06579
License Nos. 45-08890-01
and 45-08890-02
EA 87-128

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Froehling & Robertson, Inc. (licensee) is the holder of Materials License No. 45-08890-01 issued by the Nuclear Regulatory Commission (NRC/Commission) on February 21, 1963. The license authorizes the licensee to use radioactive materials for industrial radiography in accordance with the conditions specified therein.

II

A routine unannounced inspection of the licensee's activities was conducted on June 18, 1987, and a special inspection of the licensee's activities was conducted on July 13, 1987. The results of these inspections indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated November 6, 1987. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalty proposed for the violations. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalty by two letters both dated December 1, 1987. In its letters, the licensee admits the violations, but presents new information regarding violations A, B.1, B.3.b, B.3.c, B.3.d, B.3.e, and C.1, and requests that the proposed civil penalty be mitigated.

After consideration of the licensee's responses and the statements of fact, explanation, and argument for mitigation contained therein, the Deputy Executive Director for Regional Operations has determined as set forth in the Appendix to this Order that violations B.3.c and B.3.e should be withdrawn in their entirety; that portions of violations B.3.b and C.1 should be withdrawn; that the remaining portions of violations B.3.b and C.1 and the remaining violations occurred as stated; and, that the penalty proposed for the violations designated in the Notice of Violation and Proposed Imposition of Civil Penalty should be reduced by 16 percent and imposed.

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of Four Thousand Two Hundred Dollars (\$4,200) within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing should be clearly marked as a "Request for an Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement,

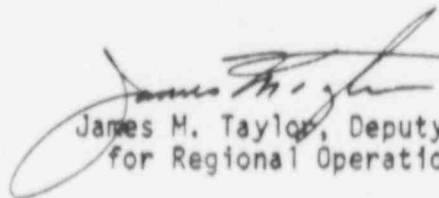
U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, Region II, 101 Marietta St., N.W., Suite 2900, Atlanta, Georgia 30323.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

Having admitted the violations, in the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

Whether, on the basis of such violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Bethesda, Maryland
this 5th day of April 1988

APPENDIX

EVALUATIONS AND CONCLUSIONS

On November 6, 1987, a Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was issued for violations identified during routine and special NRC inspections. Froehling & Robertson, Inc. responded to the Notice on December 1, 1987. In its responses, the licensee admits the violations, but presents new information regarding Violations A, B.1, B.3.b, B.3.c, B.3.d, B.3.e, and C.1, and requests that the proposed civil penalty be mitigated. The NRC's evaluation and conclusion regarding the licensee's arguments are as follows:

Restatement of Violation A

10 CrR 20.201(b) requires, in part, a licensee to make such surveys as may be necessary to comply with the regulations in 10 CFR Part 20. A "survey" is defined in 10 CFR 20.201(a) as an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of circumstances.

10 CFR 20.101 specifies radiation dose standards for individuals in restricted areas.

License Condition 16 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in documents including its license application dated May 28, 1986 and letter dated July 15, 1986, including any enclosures.

Section 5.3.1.5 of the license application requires, in part, that the licensee issue film badges for periods of two weeks or one month. At the end of the effective period, new badges are to be duly assigned. The old badge must then be returned to the Radiation Safety Officer (RSO) or his representative for transmittal to the health physics agency utilized for film badge measurements.

Contrary to the above, the licensee did not conduct such surveys as were necessary to determine the radiation doses of three employees located at the Richmond Branch location for the period between September 25, 1986 and January 15, 1987. The film badges worn by the three employees were not returned to the film badge vendor in a timely manner, and therefore the film badge vendor could not process the three employees' film badges due to the aging effects on the film from the delay in submitting the film badges. Also, the licensee did not conduct such surveys as were necessary to determine the radiation doses of six employees located at the Richmond Branch location for the period between January 15, 1986 and April 18, 1986. In this case, the film badges were not submitted to the film badge vendor for processing on a monthly frequency as specified in Section 5.3.1.5 of the license application. In neither case was a further evaluation made nor was an appropriate estimated radiation dose assigned to these individuals for these periods.

Summary of Licensee's Response

The licensee admits that the two individuals, who were assigned film badges under NRC License No. 45-08890-01 for one month periods beginning January 15, 1986, August 15, 1986, September 15, 1986, and January 15, 1987, returned their film badges to the supplier too late for radiation exposure processing.

However, the licensee contends that the "three" and "six" employees referred to in the Notice of Violation actually applied to only two individuals working for one month periods under this particular license. The licensee states that radiation exposure data from pocket dosimeters was available for the two individuals during the period in question and that the radiation dose limits for the two individuals were not exceeded.

NRC Evaluation of Licensee's Response

During the inspections conducted on June 18 and July 13, 1987, the licensee's RSO stated that three radiography employees were employed by the licensee between September 25, 1986 and January 15, 1987. Seimens monthly film badge reports (process numbers C02, K95, H99, and O24 with report print dates of September 25, 1986; December 9, 1986; January 12, 1987; and January 15, 1987, respectively) were printed and sent to Froehling & Robertson between September 25, 1986 and January 15, 1987. These film badge reports stated that monthly radiation exposures for a total of 42 film badges could not be determined during this period of time. Badges worn by three radiographers employed by Froehling & Robertson were included in the 42 film badges which could not be analyzed due to the aging effect of the film.

During the inspections, the RSO also stated that at least six radiographers were employed by the licensee between January 15 and April 18, 1986. The Seimens Radiation Exposure Report for this period (process #498 - dated April 25, 1986 - Richmond Branch) listed 54 individual film badges which were issued to Froehling & Robertson by Seimens on January 15, 1986. These 54 film badges were not received by Seimens for exposure processing until April 18, 1986. Included in the 54 film badges were film badges for six radiographers which were employed by Froehling & Robertson.

The licensee contends that the "three" and "six" employees referred to in the Notice of Violation actually applied to only two individuals working for one month periods under license no. 45-08890-01. Whether only two individuals were involved as the licensee contends, or three or six, as found by the NRC, is not at issue. The violations occurred regardless of the number of employees for whom film badges were not promptly submitted. The fact that film badges for one or more individuals were not processed as required is not disputed by the licensee. The NRC is aware that the licensee currently possesses two byproduct material licenses (license nos. 45-08890-01 and 45-08890-02). Although the licensee may only employ two individuals to work under license no. 45-08890-01, the licensee is also responsible for assuring compliance for all individuals who work with radioactive material as defined in 10 CFR 20, including individuals who work under license no. 45-08890-02. The NRC is amending its records to reflect that the violations occurred under both licenses.

At the time of the inspections, no other evaluation of the radiation exposures that may have been received by the employees during the periods in question had been performed by the licensee. Pocket dosimeter reports, without film or TLD badge reports, do not constitute an adequate evaluation of radiation hazards as defined in 10 CFR 20.201(a) and (b). The routine use of pocket dosimeters is required under License Condition 16, (Section 5.3 of the May 28, 1987 license application), but in conjunction with, rather than in lieu of, film badges.

Restatement of Violation B.1

- B. License Condition 16 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in documents including its license application dated May 28, 1986 and letter dated July 15, 1986, including any enclosures.
1. Section 14.6 of the license application requires the Primary Radiation Safety Officer (RSO), at least once per quarter, to evaluate the overall Radiological Safety Program in order to ensure that all areas are sufficient for the safe and efficient control of both personnel and material.

Contrary to the above, between June 18, 1984 and June 18, 1987, the Primary RSO did not evaluate the overall Radiological Safety Program.

Summary of Licensee's Response

The licensee asserts that it only failed to record rather than perform quarterly evaluations required. The licensee states that the evaluations were made on a continuing basis, but the need for maintaining records regarding the evaluations was mistakenly considered unnecessary.

NRC Evaluation of Licensee's Response

The Primary RSO (individual W.B.) stated at the time of the inspection that he was not aware of the requirement to re-evaluate the overall radiological safety program at least once per quarter as specified in the licensee's application. Consequently, the NRC has concluded that violation B.1 occurred as stated.

Restatement of Violation B.3.b

- B. License Condition 16 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in documents including its license application dated May 28, 1986 and letter dated July 15, 1986, including any enclosures.
3. Section 4.7 of the license application requires the licensee to record and maintain, in the form of utilization records (Form 605), complete records of all radiographic operations. This should include a sketch of the area and show placement of the source, signs, ropes, etc. The report should also contain all pertinent information concerning by-product material, survey meters, location and date(s) of operation, radiographic personnel involved, etc.

Contrary to the above:

- b. On June 9, 1987, at the Roanoke Branch operation, the licensee did not maintain a complete record of radiographic operations in that it did not record a survey of the iridium-192 radiographic exposure device (Model 520, Serial No. 720) when the device was removed from storage for use after the last exposure at the radiography site and after the radiographic exposure device was placed back in a storage area.

Summary of Licensee's Response

The licensee agrees that the utilization log (Form 605) was not used to record the survey of the exposure device on June 9, 1987. However, the licensee contends that a survey was performed of the exposure device upon removal from the storage area and was recorded on another form (Form 603).

NRC Evaluation of Licensee's Response

The NRC has determined that a survey of the radiographic exposure device was performed and recorded on another form (Form 603) upon removal of the device from storage for use after the last exposure on June 9, 1987. Therefore, this portion of the violation is withdrawn. However, as stated in violation B.3.b, the licensee did fail to record a survey of the radiographic device after the device was placed back in storage. The NRC has concluded that this portion of the violation occurred as stated.

Restatement of Violation B.3.c

- B. License Condition 16 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in documents including its license application dated May 28, 1986 and letter dated July 15, 1986, including any enclosures.
3. Section 4.7 of the license application requires the licensee to record and maintain, in the form of utilization records (Form 605), complete records of all radiographic operations. This should include a sketch of the area and show placement of the source, signs, ropes, etc. The report should also contain all pertinent information concerning by-product material, survey meters, location and date(s) of operation, radiographic personnel involved, etc.

Contrary to the above,

- c. On June 9, 1987, at the Roanoke Branch operation, the licensee did not maintain a complete record of radiographic operations in that it did not record a survey of the radiography vehicle's exterior surface or passenger compartment once the radiographic exposure device was placed in the radiography vehicle for transport.

Summary of Licensee's Response

The licensee agrees that the utilization log (Form 605) was not used to record the survey of the vehicle's exterior surface or passenger compartment on June 9, 1987. However, the licensee contends that a survey was performed and recorded on another form (Form 603).

NRC Evaluation of Licensee's Response

The NRC has determined that a survey of the vehicle's exterior surface and passenger compartment was performed and recorded on another form (Form 603) on June 9, 1987. Therefore, the NRC withdraws violation B.3.c.

Restatement of Violation B.3.d

- B. License Condition 16 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in documents including its license application dated May 28, 1986 and letter dated July 15, 1986, including any enclosures.
3. Section 4.7 of the license application requires the licensee to record and maintain, in the form of utilization records (Form 605), complete records of all radiographic operations. This should include a sketch of the area and show placement of the source, signs, ropes, etc. The report should also contain all pertinent information concerning by-product material, survey meters, location and date(s) of operation, radiographic personnel involved, etc.

Contrary to the above:

- d. On June 9, 1987, a licensee's radiographer of the Roanoke Branch operation did not record a sketch of radiographic operations at a radiography site in Blacksburg, Virginia on the utilization record.

Summary of Licensee's Response

The licensee states that the sketch was made, but that no radiation exposure levels were noted.

NRC Evaluation of Licensee Response

The sketch provided on the form was incomplete. It indicated only the location of the source. Warning signs, ropes, barricades, objects affecting the area, radiation levels, distances from the source, and the approximate exposure time were not included as required by Form 605. Therefore, the NRC has concluded that violation B.3.d occurred as stated in the Notice.

Restatement of Violation B.3.e

- B. License Condition 16 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in documents including its license application dated May 28, 1986 and letter dated July 15, 1986, including any enclosures.
3. Section 4.7 of the license application requires the licensee to record and maintain, in the form of utilization records (Form 605), complete records of all radiographic operations. This should include a sketch of the area and show placement of the source, signs, ropes, etc. The report should also contain all pertinent information concerning by-product material, survey meters, location and date(s) of operation, radiographic personnel involved, etc.

Contrary to the above:

- e. On January 7 and May 19, 1987, the licensee's Richmond Branch operation did not record on the utilization record the serial number and calibration date of the survey meter used during the radiographic operations.

Summary of Licensee's Response

The licensee agrees that the utilization log (Form 605) was not used to record the serial number and calibration date of the survey meter used during radiographic operations on January 7 and May 19, 1987. However, the licensee contends that pertinent survey meter information was recorded on another form (Form 604).

NRC Evaluation of Licensee's Response

The NRC has determined that the serial number and calibration date of the survey meter used during radiographic operations on January 7 and May 19, 1987, were recorded on another form (Form 604). Therefore, the NRC withdraws violation B.3.e.

Restatement of Violation C.1

- C. 49 CFR 71.5(a) requires that each licensee who transports licensed material outside of the confine of its plant or other place of use, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the DOT regulations in 49 CFR Parts 170 through 189 appropriate to the mode of transport.

49 CFR 172.200(a) requires that each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper in the manner required by this subpart.

1. 49 CFR 172.203(d)(1)(iii) requires the licensee's description for a shipment of radioactive material to include the activity contained in each package of the shipment in terms of curies, millicuries, or microcuries.

Contrary to the above, the licensee did not include, on shipping papers, the activity of two Iridium-192 sources (Radioactive Materials N.O.S. NA 9102, 44 kg, Special Form Type B) shipped from the Richmond Branch on April 28 and June 14, 1987.

Summary of Licensee's Response

The licensee denies one example (April 28, 1987) of violation C.1, and asserts that offsite transport of Iridium-192 source(s) did not occur on that particular date. With regard to the transport on June 14, 1987, the licensee asserts that although the activity of the source was not recorded on the shippers certification portion of the Utilization Record, it was recorded under the Equipment section of that form.

NRC Evaluation of Licensee Response

The NRC has determined that no offsite transport of iridium-192 sources occurred on April 28, 1987. However, the licensee did not include, on the shippers certification portion of the Utilization Record of the shipping papers, the activity of iridium-192 sources shipped from the Richmond Branch on June 14, 1987. Therefore, the NRC staff has concluded that the April 28, 1987, example should be withdrawn and that the June 14, 1987, example occurred as stated. Our records will be revised accordingly.

Licensee's Arguments for Mitigation of the Civil Penalty

The licensee argues that given its prior good performance, the absence of repetitive violations, and the full extent of its corrective action, including involvement of corporate management in reviewing proper documentation, establishing a computer data base for maintenance of data, and discipline of personnel, the proposed civil penalty should be mitigated. In addition, the licensee notes that violations B.1 and B.2 had not been identified for correction in previous NRC inspections; that violations B.3.b, c, and d correspond with a single use on June 9, 1987, that the incident was an exception; that the general impact of the violations was not realized until the Notice of Violation was received; and that the Enforcement Conference of July 15, 1987, did not reflect the apparent gravity of the violations.

NRC Evaluation of Licensee's Response

The licensee's prior performance and corrective actions were considered prior to issuance of the Notice. While the licensee's corrective actions were adequate, they were not so prompt and extensive as to warrant mitigation of the civil penalty, but, rather, were those that would be expected of a licensee. Similarly, the licensee's prior performance, while adequate, was not such as would warrant mitigation. With regard to the licensee's argument that its lack of repetitive violations merits mitigation, under the Enforcement Policy, while the existence of repetitive violations may result in escalation of a civil penalty, the lack of repetitive violations does not necessitate that the penalty be mitigated.

The NRC agrees that violations B.1 and B.2 were not identified by the NRC during previous inspections. However, NRC inspections are only a partial audit of a licensee's operation. The licensee is responsible for identifying violations and complying with NRC regulations and the conditions of its license.

While violations B.3.b, c, and d may involve a single incident, the NRC does not agree that this incident constitutes an exception. Rather, the Notice cites several examples of the licensee's failure to maintain complete records. Therefore, the NRC does not believe that reduction of the civil penalty is warranted for this reason.

With regard to the licensee's argument that the Enforcement Conference did not reflect the gravity of the violations, the NRC notes that during the Enforcement Conference, the licensee was made aware of the reasons for the conference as well as the policies regarding escalation, enforcement actions, and how apparent violations were reviewed and discussed. Moreover, the letter

transmitting NRC Inspection Report No. 45-02890-01/87-01 issued to the licensee on August 11, 1987, explained that escalated enforcement action was being considered as a result of the NRC inspections. Consequently, the NRC contends that the licensee was made aware of the implications of the violations and the possibility of escalated enforcement action during the Enforcement Conference and through subsequent correspondence.

NRC Conclusion

The NRC staff has concluded that violations B.3.c and B.3.e should be withdrawn in their entirety, that portions of violations B.3.b and C.1 should be withdrawn, that remaining portions of violations B.3.b and C.1 and the remaining violations occurred as stated in the Notice, and that an adequate basis has not been provided for complete reduction of the proposed civil penalty amount. Because violations B.3.c and B.3.e have been withdrawn in their entirety and because the proposed civil penalty was assessed equally among the violations, the proposed civil penalty amount has been reduced by approximately 2/13ths or 16 percent (\$800). Therefore, the NRC staff has concluded that a civil penalty in the amount of \$4,200 should be imposed.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

APR 5 1988

Docket No. 030-08833
License No. 20-15266-01
EA 58-54

Joslin Diabetes Center, Inc.
ATTN: Dr. Kenneth Quicquel
President and Chief Executive Officer
One Joslin Place
Boston, Massachusetts 02215

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC Inspection No. 030-08833/88-01)

This letter refers to the NRC inspection conducted on January 27-28, 1988, at your facility in Boston, Massachusetts to review the circumstances associated with a violation identified by your consultant (Harvard University Environmental Health and Safety Department) on January 13, 1988 and telephonically reported to the NRC on January 19, 1988. The violation involved a cumulative radiation exposure of 35.13 rem to the right hand of a research investigator during the fourth calendar quarter of 1987, an amount in excess of the regulatory limit of 18.75 rem. During the inspection, other violations of NRC requirements were identified. The report of the inspection was forwarded to you on March 11, 1988. On March 17, 1988, we held an enforcement conference with Drs. R. Smith and M. White of your staff during which the violations, their causes, and your corrective actions were discussed.

The exposure to the investigator occurred during the performance of experiments involving the use of phosphorus-32. Apparently, the investigator made a change in the procedure for handling this material without an adequate evaluation of the impact of this change on potential exposure rates, and without a "dry run" of the procedure first being performed, as required, to assess any radiological impacts. Furthermore, although your procedure required that your consultant be notified of and monitor such experiments, since they involved greater than two millicuries of phosphorus-32, such notification was not made and, consequently, monitoring was not performed. If any of these controls had been adequately implemented, the overexposure could have been prevented.

In addition, the investigator's film badge results for October 1987, which were received by your consultant from the film badge processor in November 1987, indicated a cumulative exposure for this investigator in October of 3.19 rem, an amount significantly in excess of that previously observed for this individual. However, action was not taken at that time by either your

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consultant or your staff to (1) determine the cause of that unusually high monthly exposure, (2) take appropriate corrective actions at that time, and (3) obtain expedited processing of the investigator's film badge for November to determine if such exposure was continuing. If such action had been taken in November, the overexposure could have been prevented.

These violations demonstrate the need for comprehensive management oversight, evaluation, and control of activities at your facility by members of the Joslin Diabetes Center staff, including oversight of activities performed by your consultant on your behalf, to ensure that (1) the program is operating in accordance with requirements, and (2) problems, when they occur, are promptly identified, assessed and corrected. To emphasize this need, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Two Thousand Five Hundred Dollars (\$2,500). Although the violation involving the overexposure could individually be classified as a Severity Level III violation in accordance with Section C.1 of Supplement IV of "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, (Enforcement Policy) (1987), the violations are classified in the aggregate as a Severity Level III problem since the majority of the violations either involved, or contributed to, the overexposure. The base civil penalty amount for a Severity Level III violation or problem is \$2,500.

The NRC considered mitigating the civil penalty based on your identification of the overexposure and your consultant's telephone report to the NRC, as well as your prior good enforcement history. However, mitigation is considered inappropriate since (1) your written report of the overexposure was not made to the NRC within 30 days, as required; (2) your corrective actions were not considered unusually prompt and extensive; and (3) your staff and/or your consultant had an opportunity to prevent the overexposure or identify and correct the deficiencies leading to the overexposure sooner, but failed to do so.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. In particular, you should describe in detail your plans for assuring that the radiation safety program is adequately implemented, and services performed by your consultant are properly implemented. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

Joslin Diabetes Center, Inc.

3

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James M. Allan

W William T. Russell
Regional Administrator

Enclosure: Notice of Violation
and Proposed Imposition of Civil Penalty

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
Commonwealth of Massachusetts (2)

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Joslin Diabetes Center, Inc.
Boston, Massachusetts

Docket No. 030-08833
License No. 20-15266-01
EA 88-54

During an NRC inspection conducted on January 27 - 28, 1988, 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 penalty are set forth below:

- A. 10 CFR 20.101(a) requires that no licensee possess, use, or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter a total occupational radiation exposure (dose) in excess of 18.75 rems to the hands and forearms.

Contrary to the above, during the fourth calendar quarter of 1987, an individual working with phosphorus-32 in a restricted area received a cumulative radiation exposure (dose) of 35.13 rems to his right hand.

- B. 10 CFR 20.201(b) requires each licensee to make such surveys as (1) may be necessary to comply with the regulations in Part 20 and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As defined in 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radiation under a specific set of conditions.

Contrary to the above, during the fourth calendar quarter of 1987, a research investigator used a new procedure to handle millicurie quantities of phosphorus-32, but a survey (evaluation) was not performed to assure that the individual handling this material would not receive a radiation dose to his extremities in excess of the level specified in 10 CFR 20.101(a).

- C. 10 CFR 20.405(a) requires, in part, that the NRC be notified in writing within 30 days of the occurrence of an exposure to an individual to radiation in excess of the applicable limits of 10 CFR 20.101.

Contrary to the above, during the fourth calendar quarter of 1987, an individual research investigator received a radiation exposure to the right hand in excess of the limits set forth in 10 CFR 20.101, and although the licensee's consultant (Harvard University Environmental Health and Safety Department) became aware of this overexposure upon

receipt of the individual's processed film badge results on January 13, 1988, a written report was not made to the NRC until February 24, 1988.

- D. Condition 13 of License No. 20-15266-01 requires that licensed material be possessed and used in accordance with the statements, representations, and procedures contained in an application dated February 24, 1984, with attachments. One of those attachments is entitled, "Special Instructions for the Use of Phosphorus-32 - August 31, 1983."
1. Paragraph 4 of this attachment requires that whenever a new procedure involving phosphorus-32 is used, a dry run shall be performed under the supervision of the Radiation Safety Office in order to familiarize the user with the reactions and any unusual circumstances that may be inherent within the experiment.

Contrary to the above, during the fourth calendar quarter of 1987, an investigator performed experiments with phosphorus-32 using a new procedure and, prior to the use of this procedure, a dry run was not completed to familiarize the user with certain unusual circumstances, specifically, the potential for high radiation dose rates to the extremities associated with the experiment.

2. Paragraph 7 of this attachment requires that in any experiment in which more than 2 millicuries of phosphorus-32 is to be employed, a designated representative of the Harvard staff will be present to assist in monitoring the safety of the experiment.

Contrary to the above, during the fourth calendar quarter of 1987, an experiment involving the use of 20 millicuries of phosphorus-32 was performed by a research investigator without the designated representative of the Harvard staff being present to assist in monitoring the safety of the experiment.

3. Paragraph 6 of this attachment requires any users of phosphorus-32 to be familiar with the content and safety precautions specified in a New England Nuclear (NEN) bulletin, "Phosphorus-32: Handling and Hazards."

Contrary to the above, as of January 28, 1988, a research investigator using phosphorus-32 was not familiar with the contents and safety precautions specified in the NEN bulletin.

- E. 10 CFR 19.11(a) and (b) require that current copies of Parts 19 and 20, the license, license conditions, documents incorporated into the license, license amendments and operating procedures be posted, or that a notice be posted describing these documents and where they may be examined.

Contrary to the above, on January 28, 1988, the documents required to be posted by 10 CFR 19.11(a) and (b) were not posted nor was a notice posted describing these documents and where they could be examined.

These violations are classified in the aggregate as a Severity Level III problem (Supplements IV and VI).

Cumulative Civil Penalty - \$2,500 - assessed equally among the violations.

Pursuant to the provisions of 10 CFR 2.201, Joslin Diabetes Center (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 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.

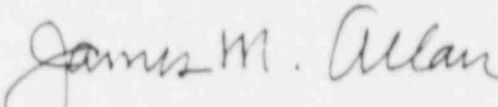
Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, or money order payable to the Treasurer of the United States in the amount of the civil penalty proposed, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I.

FOR THE NUCLEAR REGULATORY COMMISSION


jm William T. Russell
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 5th day of April 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUN 13 1988

Docket No. 30-08833
License No. 20-15266-01
EA 88-54

Joslin Diabetes Center, Inc.
ATTN: Dr. Kenneth Quickel
President and Chief
Executive Officer
One Joslin Place
Boston, Massachusetts 02215

Gentlemen:

Subject: ORDER IMPOSING A CIVIL MONETARY PENALTY

This refers to your letter dated April 28, 1988, in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you with our letter dated April 5, 1988. Our Letter and Notice describe seven violations identified during NRC Inspection No. 88-01, conducted on January 27 - 28, 1988, including a violation involving an exposure in excess of the regulatory limit to the right hand of a researcher at your facility during the fourth calendar quarter of 1987. A civil penalty in the amount of Two Thousand Five Hundred Dollars (\$2,500) was proposed to emphasize the need for comprehensive management oversight, evaluation and control of activities at your facility, including activities performed by your consultant on your behalf, to ensure that (1) the program is operating in accordance with requirements, and (2) problems when they occur, are promptly identified, assessed and corrected.

In your response, you admit the cited violations but request reduction or elimination of the civil penalty based on several factors. After careful consideration of your response, we have concluded, for the reasons given in the Appendix attached to the enclosed Order imposing a Civil Monetary Penalty, that a sufficient basis has been provided for 75% mitigation of the civil penalty. Accordingly, we hereby serve the enclosed Order on Joslin Diabetes Center imposing a civil monetary penalty in the amount of Six Hundred and Twenty-Five Dollars (\$625). We will review the effectiveness of your corrective actions during a subsequent inspection.

In your response, you also noted that the researcher's film badge results for October 1987, which indicated a significant increase in exposure over previous months, were not reported to you by your consultant (Harvard University Environmental Health and Safety Department) until January 1988. Since the consultant had apparently received these results from the film badge processor (Landauer) in November 1987, as described during the enforcement conference on March 17, 1988, the NRC remains concerned that action was not taken at that time by your consultant to either promptly inform you of these results or determine the cause of the unusually high exposure, so that you could take appropriate corrective action. Therefore, we reiterate your responsibility to

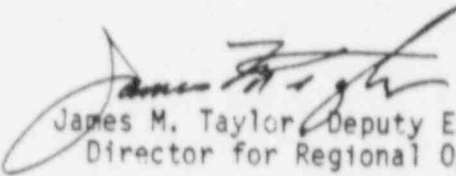
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maintain adequate control not only over your employees, but also over any consultants or contractors you utilize to implement the radiation safety program. Further, we emphasize, that any similar lack of control in the future could result in more significant enforcement action.

We acknowledge that the verbal report of the overexposure was made by your consultant to the NRC on January 14, 1988, rather than on January 19, 1988, as stated in our April 5 letter. We apologize for this error.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room

Sincerely,



James M. Taylor Deputy Executive
Director for Regional Operations

Enclosures:

1. Order Imposing Civil Monetary Penalty
2. Appendix - Evaluation and Conclusion

cc w/encls:

Public Document Room
Nuclear Safety Information Center (NSIC)
Commonwealth of Massachusetts (2)

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

JOSLIN DIABETES CENTER, INC.
Boston, Massachusetts

)
)
)
)

Docket No. 30-08833
License No. 20-15266-01
EA 88-54

ORDER IMPOSING CIVIL MONETARY PENALTY

Joslin Diabetes Center, Boston, Massachusetts, (licensee) is the holder of Byproduct Material License No. 20-15266-01 (license) issued by the Nuclear Regulatory Commission (Commission or NRC) which authorizes the licensee to perform in vitro studies and laboratory research. The license was originally issued on September 23, 1972, was most recently renewed on April 2, 1987, and is due to expire on September 30, 1988.

II

An NRC safety inspection of the licensee's activities under the license was conducted on January 27 - 28, 1988. During the inspection, the NRC staff determined that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated April 5, 1988. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalty proposed for the violations. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalty (NOV) by two letters both dated April 28, 1988. In its responses, the licensee admitted that the violations occurred as stated in the NOV but requested that the civil penalty be reduced or eliminated.

III

After consideration of the licensee's responses and the statements of fact, explanations, and argument for mitigation contained therein, the Deputy Executive Director for Regional Operations has determined, as set forth in the Appendix to this Order, that the violations occurred as stated but, for reasons set forth in the attached Appendix, the penalty proposed for the violations described in the Notice of Violation and Proposed Imposition of Civil Penalty should be reduced to \$625.

IV

In view of the foregoing, and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2062, PL 96-295), and 10 CFR 2.205, IT IS HEREBY ORDERED THAT,

The licensee pay a civil penalty in the amount of Six Hundred Twenty-Five Dollars (\$625) within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States, and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

V

The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing shall be clearly marked as a "Request for an

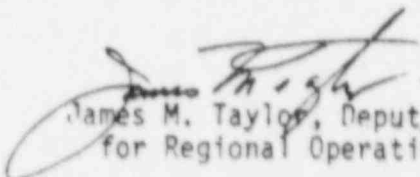
Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, Region I, 475 Allendale Road, King of Prussia, Pennsylvania 19406.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

whether, on the basis of the admitted violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Rockville, Maryland
this ~~30~~³¹ day of June 1988

APPENDIX
EVALUATION AND CONCLUSION

On April 5, 1988, a Notice of Violation and Proposed Imposition of Civil Penalty (NOV) was issued for violations identified during an NRC inspection. Joslin Diabetes Center, Inc., responded to the Notice by two letters dated April 28, 1988. In its responses the licensee admitted that the violations occurred, but requested that the civil penalty be reduced or eliminated. The NRC's evaluation and conclusion regarding the licensee's arguments are as follows:

Restatement of Violations

- A. 10 CFR 20.101(a) requires that no licensee possess, use, or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter a total occupational radiation exposure (dose) in excess of 18.75 rems to the hands and forearms.

Contrary to the above, during the fourth calendar quarter of 1987, an individual working with phosphorus-32 in a restricted area received a cumulative radiation exposure (dose) of 35.13 rems to his right hand.

- B. 10 CFR 20.201(b) requires each licensee to make such surveys as (1) may be necessary to comply with the regulations in Part 20 and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As defined in 10 CFR 20.201(a) "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radiation under a specific set of conditions.

Contrary to the above, during the fourth calendar quarter of 1987, a research investigator used a new procedure to handle millicurie quantities of phosphorus-32, but a survey (evaluation) was not performed to assure that the individual handling this material would not receive a radiation dose to his extremities in excess of the level specified in 10 CFR 20.101(a).

- C. 10 CFR 20.405(a) requires, in part, that the NRC be notified in writing within 30 days of the occurrence of an exposure to an individual to radiation in excess of the applicable limits of 10 CFR 20.101.

Contrary to the above, during the fourth calendar quarter of 1987, an individual research investigator received a radiation exposure to the right hand in excess of the limits set forth in 10 CFR 20.101, and although the licensee's consultant (Harvard University Environmental Health and Safety Department) became aware of this overexposure upon receipt of the individual's processed film badge results on January 13, 1988, a written report was not made to the NRC until February 24, 1988.

D. Condition 13 of License No. 20-15266-01 requires that licensed material be possessed and used in accordance with the statements, representations, and procedures contained in an application dated February 24, 1984, with attachments. One of those attachments is entitled, "Special Instructions for the Use of Phosphorus-32 - August 31, 1983."

1. Paragraph 4 of this attachment requires that whenever a new procedure involving phosphorus-32 is used, a dry run shall be performed under the supervision of the Radiation Safety Office in order to familiarize the user with the reactions and any unusual circumstances that may be inherent within the experiment.

Contrary to the above, during the fourth calendar quarter of 1987, an investigator performed experiments with phosphorus-32 using a new procedure and, prior to the use of this procedure, a dry run was not completed to familiarize the user with certain unusual circumstances, specifically, the potential for high radiation dose rates to the extremities associated with the experiment.

2. Paragraph 7 of this attachment requires that in any experiment in which more than 2 millicuries of phosphorus-32 is to be employed, a designated representative of the Harvard staff will be present to assist in monitoring the safety of the experiment.

Contrary to the above, during the fourth calendar quarter of 1987, an experiment involving the use of 20 millicuries of phosphorus-32 was performed by a research investigator without the designated representative of the Harvard staff being present to assist in monitoring the safety of the experiment.

3. Paragraph 6 of this attachment requires any users of phosphorus-32 to be familiar with the content and safety precautions specified in a New England Nuclear (NEN) bulletin, "Phosphorus-32: Handling and Hazards."

Contrary to the above, as of January 28, 1988, a research investigator using phosphorus-32 was not familiar with the contents and safety precautions specified in the NEN bulletin.

- E. 10 CFR 19.11(a) and (b) require that current copies of Parts 19 and 20, the license, license conditions, documents incorporated into the license, license amendments and operating procedures be posted, or that a notice be posted describing these documents and where they may be examined.

Contrary to the above, on January 28, 1988, the documents required to be posted by 10 CFR 19.11(a) and (b) were not posted nor was a notice posted describing these documents and where they could be examined.

These violations are classified in the aggregate as a Severity Level III problem (Supplements IV and VI).

Cumulative Civil Penalty - \$2,500 - assessed equally among the violations.

Summary of Licensee's Response

The licensee admits all of the seven violations, six of which were directly related to the overexposure incident. However, the licensee requests reduction or elimination of the civil penalty based on its previous performance record and demonstrated efforts to assure radiation safety, changes made in its radiation safety program prior to the violations, and its prompt corrective action. The licensee also asserts that, as a non-profit institution whose funding is used for the treatment and cure of diabetes, the civil penalty would represent a significant financial burden. In addition, the licensee described its corrective actions.

NRC Evaluation

The NRC, in its letter dated April 5, 1988, transmitting the Notice of Violation, acknowledged that the licensee had a prior good enforcement history, and also acknowledged that the licensee had identified the overexposure and had ensured that its consultant verbally informed the NRC of the overexposure. As noted in the letter, while these factors would normally result in at least partial mitigation of the civil penalty, the NRC decided that any adjustment to the civil penalty amount was inappropriate since (1) the licensee's written report of the overexposure was not made to the NRC within 30 days, as required; (2) the licensee's corrective actions were not viewed as unusually prompt and extensive; and (3) the licensee's staff and/or consultant had an opportunity to prevent the overexposure or identify and correct the deficiencies leading to the overexposure sooner, but failed to do so.

The licensee in its April 28, 1988 response, acknowledged that the written report of the overexposure was not submitted within 30 days, as required. Further, the licensee indicated that its consultant had not informed it of the October 1987 film badge result until January 1988, and although not addressed by the licensee, the consultant apparently took no action on his own prior to that time to ascertain the cause of the unusually high reading. The NRC has reconsidered the licensee's corrective actions as well as their past performance since 1977, which consisted of only one violation during four NRC inspections since that time. The licensee's corrective actions included: (a) taking immediate steps to prevent further exposure; (b) modifying procedures for monitoring radioisotope use and verifying film badge reports including developing a system for timely monitoring of the return of results on all film badges, and intensifying supervision of the type of experiment that contributed to the overexposure; (c) modifying the education program; and (d) increasing review and supervision of the researcher who received the overexposure.

Based upon a reconsideration of the licensee's corrective actions and past performance, the NRC has determined that a 75% reduction in the civil penalty amount is appropriate. Full mitigation is not warranted because of the licensee's opportunity in November 1987 to detect and prevent this overexposure as well as the circumstances of the overexposure, i.e., changing the experiments without an adequate evaluation of the potential exposure rates and performing the experiments without a "dry run."

NRC Conclusion

The licensee has provided an adequate basis for a 75% reduction in the proposed civil penalty. Therefore, a civil penalty in the amount of \$625 should be imposed.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

March 29, 1988

Docket Nos. 030-11643 and 030-12125
License Nos. 37-16707-01 and 37-16707-02G
EA 87-241

Micromedic Systems, Inc.
ATTN: Dr. Thomas Stonecypher, Ph.D.
Operations Manager
10, Witmer Road
Horsham, Pennsylvania 19044

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC Inspection No. 87-001)

This letter refers to the NRC inspection conducted on December 15-16, 1987, January 29 and February 3, 1988 at Micromedic Systems, Inc. of activities authorized by NRC License Nos. 37-16707-01 and 37-16707-02G. The report of this inspection was sent to you on February 25, 1988. During the inspection, violations of NRC requirements were identified. On March 4, 1988, an enforcement conference was conducted with you, a member of your staff, and your consultant to discuss the violations, their causes and your corrective actions.

The violations, which are described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty, include: (1) the unauthorized disposal of radioactive waste in the normal trash; and, (2) three examples of failure to perform adequate surveys, as required, at the facility. Although the safety significance of the individual violations is low, the NRC is nonetheless concerned that these violations should have been precluded by your staff during implementation and supervision of site activities. We are particularly concerned that control of your radiation safety program was fragmented, as evidenced by the fact that a Radiation Safety Officer was established for each of the three departments at your facility, without any individual having full responsibility and authority for assuring prompt implementation of the entire radiation safety program. In addition, we are concerned that your employees did not know how to properly respond to incidents involving spills of radioactive materials.

Although the NRC recognizes that you have hired a consultant and have planned certain corrective actions in response to these findings, these violations demonstrate the need for clear delineation of the lines of responsibility, authority and accountability concerning implementation of radiation safety program requirements, so as to ensure proper implementation of this program. To emphasize this need, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

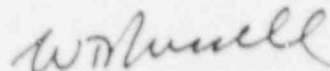
of Civil Penalty in the amount of Five Hundred Dollars (\$500) for the violations described in that Notice. Although Violation A in the enclosed Notice could individually be classified at Severity Level III in accordance with Section C.6 of Supplement IV of the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987), the violations described in the Notice have been classified in the aggregate as a Severity Level III problem to focus on their underlying cause; namely, fragmented control of the radiation safety program. The base civil penalty for a Severity Level III violation or problem is \$500. The escalation and mitigation factors were considered and no adjustment to the base civil penalty amount is appropriate.

You are required to respond to this letter and the enclosed Notice, and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. Your response should also address the adequacy of your training programs. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further action is needed to ensure compliance with regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL No. 96-511.

Sincerely,



William T. Russell
Regional Administrator

Enclosure: Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
Public Document Room
Nuclear Safety Information Center (NSIC)
Commonwealth of Pennsylvania

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Micromedic Systems, Inc.
Horshem, Pennsylvania

Docket Nos. 030-11643 and 030-12125
License Nos. 37-16707-01 and 37-16707-02G
EA 87-241

During an NRC inspection conducted on December 15-16, 1987, January 29 and February 3, 1988, 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 penalty are set forth below:

- A. 10 CFR 20.301 requires that no licensee dispose of licensed material except in the manner provided therein.

Contrary to the above, on December 16, 1987, licensed material on absorbent paper, test tubes, and other glassware was found disposed of in three trash cans (used for nonradioactive material) in the licensee's facility and in a trash dumpster located outside the facility, and this method of disposal of radioactive waste is not authorized by 10 CFR 20.301.

- B. 10 CFR 20.201(b) requires that each licensee make such surveys as may be necessary to comply the regulations in Part 20. As defined in 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above, as of December 16, 1987,

1. surveys made to assure compliance with 10 CFR 20.106, which limits the average concentration of iodine-125 contained in the air that may be discharged to unrestricted areas in a year, were inadequate. Specifically, the evaluations of concentrations of iodine-125 released to the unrestricted areas were incorrect in that the licensee's calculations used incorrect counting and collection efficiencies.
2. surveys were not made to assure compliance with 10 CFR 20.301, which describes the authorized means of disposing of licensed material contained in waste. Specifically, surveys for contamination on absorbent materials containing measurable amounts of iodine-125 were not made prior to disposing of the material in the normal trash.

3. surveys were not made in certain unrestricted areas to assure compliance with 10 CFR 20.105(b), which limits radiation levels in unrestricted areas. Specifically, surveys were not made outside the iodination laboratory or the waste barrel storage and compaction area, where radioactive materials were stored.

These violations have been categorized in the aggregate as a Severity Level III problem (Supplements IV and VI).

Cumulative Civil Penalty - \$500 (assessed equally between the violations)

Pursuant to the provisions of 10 CFR 2.201, Micromedic Systems, Inc. (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 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 penalty by letter 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 amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation(s) 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, such answer may request remission or mitigation of the penalty.

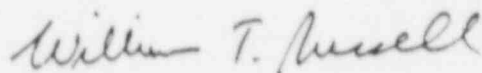
In requesting mitigation of the proposed penalty, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1988), should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, 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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, 475 Allendale Road, King of Prussia, Pennsylvania, 19406.

FOR THE NUCLEAR REGULATORY COMMISSION



William T. Russell
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 29 day of March 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

DEC 22 1987

Docket No. 30-14868
License No. 35-18336-01
EA 87-178

Osage Wireline Service
ATTN: Sherman Perrin, President
Route 3, Highway 64
Cleveland, Oklahoma 74020

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC INSPECTION REPORT NO. 30-14868/87-01)

This refers to the inspection conducted on August 17, 1987, at Osage Wireline Service facilities by personnel of the NRC Region IV office. During this inspection NRC personnel identified several violations which were discussed at an enforcement conference on September 22, 1987, in Tulsa, Oklahoma. Based on additional information presented by the licensee at the enforcement conference, apparent violation numbers 6 and 12 in NRC Inspection Report 30-14868/87-01 have been deleted and violations 1 and 2 have been revised.

The violations that are described in the enclosed Notice include (1) individuals handling radioactive sources without the benefit of tools, (2) failure to perform radiation surveys at job sites, (3) failure to maintain records of inventories of radioactive sources, (4) failure to mark shipments of radioactive material in accordance with U.S. Department of Transportation requirements, (5) failure to label shipments of radioactive material in accordance with U.S. Department of Transportation requirements, (6) failure to evaluate personnel monitoring devices as required, (7) failure to store radioactive materials according to approved procedures, (8) failure to maintain records of radiation surveys, (9) unauthorized Radiation Safety Officer, (10) failure to place radioactive sources in shielded containers in the proper configuration, (11) failure to perform radiation surveys of areas in which radioactive material was stored, (12) failure to properly post the area in which radioactive materials were stored, (13) failure to secure radioactive sources from unauthorized removal, and (14) failure to maintain complete records of personnel monitoring results.

These violations are of concern to the NRC because they demonstrate a significant breakdown in management oversight and control of your licensed program. Violations A and B are of particular concern to the NRC because of the unnecessary radiation exposure to workers from handling the sources without the use of handling tools and the potential for unnecessary radiation exposures because of failure to do surveys. In addition, Violation A is a repeat of a violation which was identified in the last inspection in 1983 and Violation B occurred on 13 occasions during the period of December 17, 1986 through August 17, 1987. These violations indicate a complacent attitude by members of your organization towards compliance with NRC requirements and raise questions concerning your training program.

CERTIFIED MAIL
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To emphasize the need to improve management controls over licensed activities, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of One Thousand Five Hundred Dollars (\$1,500) for the violations described in the enclosed Notice. The violations described in the enclosed Notice have been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy).

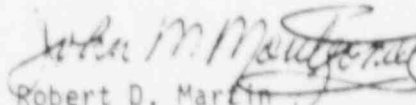
Violations A and B of the enclosed Notice have been categorized as Severity Level III violations. Collectively, the violations in Section C of the enclosed Notice have been categorized as a Severity Level III violation to focus on the breakdown in management oversight and control. The base value for a Severity Level III violation is \$500. The mitigation and escalation factors in the Enforcement Policy were considered and no mitigation or escalation was deemed appropriate.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,


for Robert D. Martin
Regional Administrator

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalties

cc: Oklahoma Radiation Control Program Director

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Osage Wireline Service
Cleveland, Oklahoma

Docket No. 30-14868
License No. 35-18336-01
EA 87-178

During an NRC inspection conducted on August 17, 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 civil penalties 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:

- A. Section 8.3.2 of the procedures submitted with the license application states that neutron source handling shall be performed using the approved handling tool only.

Contrary to the above, on August 17, 1987, a Licensee's representative stated to the NRC inspector that he routinely handled the neutron source with his hands.

This is a repeat violation.

This is a Severity Level III violation (Supplement IV).

Civil Penalty - \$500.

- B. Section 8.5.1 of the procedures submitted with the license application states that a radiation survey of the job site will be performed before and after each job.

Contrary to the above, on 13 occasions during the period of December 17, 1986 through August 17, 1987, radiation surveys of job sites were not performed before and after each job.

This is a Severity Level III violation (Supplement IV).

Civil Penalty - \$500.

- C. 1. License Condition 16 requires that the licensee conduct a physical inventory every 6 months to account for all sealed sources received and possessed under the license, and maintain records of such inventories for 2 years from the date of each inventory.

Contrary to the above, records of inventories of sealed sources were not maintained from August 1985 until August 1987.

2. License Condition 17 requires that the Licensee transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of 10 CFR Part 71. 10 CFR 71.5(a) requires, in part, that each licensee who transports licensed material outside the confines of its plant or other place of use, or who

delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation in 49 CFR Parts 170-189.

- a. 49 CFR 172.300(a) requires that each person who offers for transport a package containing hazardous material mark each package in a manner required by Subpart D of Part 172. 49 CFR 172.301(a) requires, in part, that a package having a rated capacity of 110 gallons or less be marked with the proper shipping name and identification number (preceded by "UN" or "NA" as appropriate). 49 CFR 172.310(a) requires, in part, that in addition to any other markings, each package of radioactive material which conforms to the requirements for Type A or Type B packaging be plainly and durably marked with the words "TYPE A" or "TYPE B" as appropriate.

Contrary to the above, as of August 17, 1987, sources T-951 (4.65 curies of americium-beryllium) and CSV-650 (2 curies of cesium) had been transported and the transportation containers, with a rated capacity of less than 110 gallons, used to ship these sources were not marked with the proper shipping name and identification number or with the words "TYPE A" or "TYPE B" as appropriate.

- b. 49 CFR 172.403 requires, in part, that unless excepted from labeling by Sections 173.421 through 173.425, each package of radioactive material be labeled, as appropriate, with a RADIOACTIVE WHITE-I, a RADIOACTIVE YELLOW-II, or a RADIOACTIVE YELLOW-III label.

Contrary to the above, as of August 17, 1987, sources T-951 (4.65 curies of americium-beryllium) and CSV-650 (2 curies of cesium) had been transported and the packages were not labeled as required by 49 CFR 172.403, nor were they excepted from labeling.

This is a repeat violation.

3. License Condition 18 requires, in part, that licensed material be possessed and used in accordance with statements, representations, and procedures contained in the application dated October 22, 1978 and letter dated January 16, 1985.
 - a. Section 2 of the procedures submitted with the license application requires that thermoluminescent dosimeter (TLD) Gamma-Neutron badges be processed on a quarterly basis.

Contrary to the above, as of August 17, 1987, employee badges for the fourth quarter of 1986 were not processed.
 - b. Section 3 of the procedures submitted with the license application requires that all sources of radioactivity be kept locked in the Licensee's Radioactive Material storage unless actually in use.

Contrary to the above, from August 15 until August 17, 1987, a 2 curie cesium-137 source and a 4.65 americium-beryllium source were not kept locked in the licensee's Radiation Material storage but were stored on a truck.

- c. Section 8.5.3 of the procedures submitted with the license application states that the results of surveys of the job site will be recorded on the Radiation Survey Data Sheet.

Contrary to the above, no record of the results of surveys of job sites was maintained for the period December 19, 1986 through August 15, 1987.

- d. The Licensee's letter of January 16, 1985 states that a specified individual had assumed the position of Radiation Safety Officer (RSO).

Contrary to the above, as of August 17, 1987, the specified RSO was no longer employed by the Licensee, and the duties of the RSO had been performed by an unauthorized RSO since about December 17, 1986.

- e. Figure #9 submitted with the license application diagrams the required configuration that neutron source holders shall have when being housed in shielded containers.

Contrary to the above, as of August 17, 1987, neutron source holders housed in shielded containers did not have the required configuration.

- 4. 10 CFR 20.201(b) requires that each licensee shall make or cause to be made such surveys as (1) may be necessary for the licensee to comply with the regulations in 10 CFR Part 20, and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

10 CFR 20.105(b)(1) and (2) require that no licensee possess, use, or transfer licensed material in such a manner as to create in any unrestricted area radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of 2 millirems in any hour or 100 millirems in any 7 consecutive days.

Contrary to the above, from August 17, 1987 until approximately December 17, 1987, surveys had not been made of the unrestricted areas adjacent to the radioactive source storage area.

- 5. 10 CFR 20.203(e) requires, in part, that areas in which licensed material in an amount exceeding 10 times the quantity specified in Appendix C of 10 CFR Part 20 are stored or used be conspicuously posted with a sign or signs bearing the words "CAUTION RADIOACTIVE MATERIALS" or "DANGER RADIOACTIVE MATERIALS."

Contrary to the above, as of August 17, 1987, the storage area which contained licensed material in an amount exceeding 10 times the quantity specified in Appendix C of 10 CFR Part 20 was not posted with a sign or signs bearing the words "CAUTION RADIOACTIVE MATERIALS" or "DANGER RADIOACTIVE MATERIALS."

6. 10 CFR 20.207(a) requires that licensed materials stored in an unrestricted area be secured against unauthorized removal from the place of storage. As defined in 10 CFR 20.3(a)(17), an unrestricted area is any area to which access is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above, on August 17, 1987, a cesium-137 source (serial no. CSV-650) was stored in an open transportation container in a truck parked in an open garage, an unrestricted area, and was not secured against unauthorized removal.

7. 10 CFR 20.401(a) requires that each licensee maintain records showing the radiation exposures of all individuals for whom personnel monitoring is required.

Contrary to the above, as of August 17, 1987, exposure records for the second quarter of 1987 were not maintained for employees for whom such monitoring was required.

Collectively the above violations have been categorized as a Severity Level III problem (Supplements IV, V, and VI).

Cumulative Civil Penalty - \$500 assessed equally among the violations.

Pursuant to the provisions of 10 CFR 2.201, Osage Wireline Service (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 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 amount of the civil penalties proposed above, 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

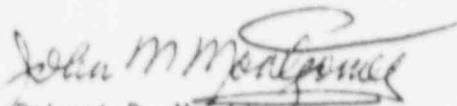
the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice 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 penalties should not be imposed. In addition to protesting the civil penalties, such answer may request remission or mitigation of the penalties.

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 civil penalties.

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 penalties, 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.

FOR THE NUCLEAR REGULATORY COMMISSION


for Robert D. Martin
Regional Administrator

Dated at Arlington, Texas,
this 22nd day of December 1987.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 8 7 1988

Docket No. 30-14868
License No. 35-18336-01
EA 87-178

Osage Wireline Service
ATTN: Sherman Perrin, President
Route 3, Highway 64
Cleveland, Oklahoma 74020

Gentlemen:

SUBJECT: ORDER IMPOSING CIVIL MONETARY PENALTIES

This refers to your two letters received by the NRC Region IV office on January 28, 1988, in response to the Notice of Violation and Proposed Imposition of Civil Penalties sent to you by our letter dated December 22, 1987. Our letter and Notice described 14 violations, identified during an NRC inspection on August 17, 1987, at Osage Wireline Service facilities.

To emphasize the need to improve management controls over licensed activities, civil penalties of One Thousand Five Hundred Dollars (\$1,500) were proposed.

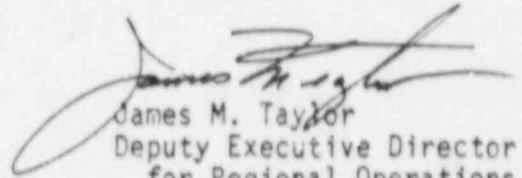
In your responses you deny two violations, claim that one violation was "unnecessary," and offer explanations for the violations which you have admitted. In addition, you set forth reasons why you believe that the civil penalties are excessive and unwarranted, and detrimental to your survival. In this regard, by letter dated February 16, 1988, the NRC provided you with the opportunity to submit financial information on your recent profit and loss and net worth. You subsequently submitted your corporate income tax returns for 1987 and 1986 and financial statements for 1987.

After careful consideration of your responses and the financial information which you submitted, we have concluded for the reasons given in the Appendix attached to the enclosed Order Imposing Civil Penalties that violation C.3.a did not occur as set forth in the Notice of Violation and should be withdrawn, and the civil penalties reduced accordingly, and that violation C.4. should be amended. However, we have concluded that the other violations occurred as stated in the Notice, and that you have not provided a sufficient basis for further reduction or mitigation of the civil penalties. Accordingly, we hereby serve the enclosed Order on Osage Wireline Service imposing civil monetary penalties in the amount of One Thousand Four Hundred Fifty Dollars (\$1,450). We will review the effectiveness of your corrective actions during a subsequent inspection.

CER. MAIL
RET. IPT REQUESTED

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room.

Sincerely,



James M. Taylor
Deputy Executive Director
for Regional Operations

Enclosures: As stated

cc: Oklahoma Radiation Control Program Director

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of
OSAGE WIRELINE SERVICE
Cleveland, Oklahoma

Docket No. 30-14868
License No. 35-18336-01
EA 87-178

ORDER IMPOSING CIVIL MONETARY PENALTIES

I

Osage Wireline Service, Cleveland, Oklahoma (the licensee) is the holder of Materials License No. 35-18336-01 issued by the Nuclear Regulatory Commission (the NRC or Commission) on December 14, 1978, and amended in its entirety on June 26, 1985. The license authorizes the licensee to use sealed sources for oil and gas well logging in accordance with the conditions specified therein.

II

A routine inspection of the licensee's activities was conducted on August 17, 1987. The results of this inspection indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalties was served upon the licensee by letter dated December 22, 1987. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalties proposed for the violations. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalties by two letters received by the NRC Region IV office on January 28, 1988.

In its responses, the licensee denied two violations, contended that one violation was "unnecessary" and stated that the civil penalties would be detrimental to its survival. Consequently, by letter dated February 16, 1988, the NRC provided the licensee with the opportunity to submit financial

information on its recent profit and loss and its net worth. The licensee subsequently submitted its corporate income tax returns for 1985 and 1986 and financial statements for 1987.

III

After consideration of the licensee's response and the statements of fact, explanation, and argument for mitigation contained therein, the Deputy Executive Director for Regional Operations has determined as set forth in the Appendix to this Order that violation C.3.a should be withdrawn and the civil penalties reduced accordingly, and that violation C.4 should be amended, but that the remaining violations occurred as stated and that the penalties proposed for these violations designated in the Notice of Violation and Proposed Imposition of Civil Penalties should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay civil penalties in the amount of One Thousand Four Hundred Fifty Dollars (\$1,450) within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

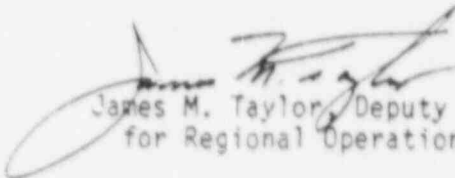
The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing should be clearly marked as a "Request for an Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

- (a) whether the licensee was in violation of the Commission's requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties referenced in Section II above, as amended by this Order, and
- (b) whether, on the basis of such violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Rockville, Maryland,
this ~~27~~ day of May 1988.

APPENDIX

EVALUATION AND CONCLUSION

On December 22, 1987, a Notice of Violation and Proposed Imposition of Civil Penalties (NOV) was issued for the violations identified during a routine NRC inspection. Osage Wireline Service responded to the Notice by two letters received in the NRC Region IV office on January 28, 1988, and subsequent statements of the corporate financial status. The licensee denied two violations, stated that one violation was "unnecessary" and requested complete mitigation of the civil penalties. The NRC's evaluation and conclusion regarding the licensee's arguments are as follows:

I. Restatement of Violation A

Section 8.3.2 of the procedures submitted with the license application states that neutron source handling shall be performed using the approved handling tool only.

Contrary to the above, on August 17, 1987, a Licensee's representative stated to the NRC inspector that he routinely handled the neutron source with his hands.

This is a repeat violation.

Summary of Licensee's Response

The licensee denies routinely handling the neutron source, but admits that Section 8.3.2 of the Procedure states that neutron sources shall be handled by approved handling tools only. The licensee claims that this rule does not consider practical application of source maintenance, and that there are times when touching a source is inevitable. The licensee argues that the words "routinely handle" unfairly invoke thoughts of negligence and complacency, that it has always done the best job to avoid contact or exposure, and that therefore a penalty for this matter is unjust.

NRC Evaluation of Licensee's Response

The licensee denies only that the neutron source was handled with the hands routinely. The frequency of such handling is not the only important issue. Also important is that the source was handled with the hands in violation of Section 8.3.2 of procedures. The NRC does not consider it ever necessary to touch a neutron source and maintains that neutron source handling should always be performed using approved handling tools. Therefore, Violation A occurred as stated.

Restatement of Violation B

Section 8.5.1. of the procedures submitted with the license application states that a radiation survey of the job site will be performed before and after each job.

Contrary to the above, on 13 occasions during the period of December 17, 1986 through August 17, 1987, radiation surveys of job sites were not performed before and after each job.

Summary of Licensee's Response

The licensee admits to not performing job surveys on 13 occasions, despite the requirement of Section 8.5.1 of the Procedure Manual that surveys will be performed before and after each job. However, the licensee argues that some situations exist where these surveys are not warranted, in the view of its company representative. It states that "interpretations" differed from regulations, but its representatives were not negligent in overall safety practices of job surveys, and that a penalty for this violation is unjust.

NRC Evaluation of Licensee's Response

The NRC maintains that radiation surveys of job sites should always be performed before and after each job in order to determine that there is no contamination. Moreover, the licensee committed to following its procedures which clearly required that surveys be performed before and after each job. Therefore, violation B remains as stated.

Restatement of Violation C.1

License Condition 16 requires that the licensee conduct a physical inventory every 6 months to account for all sealed sources received and possessed under the license, and maintain records of such inventories for 2 years from the date of each inventory.

Contrary to the above, records of inventories of sealed sources were not maintained from August 1985 until August 1987.

Summary of Licensee's Response

The licensee admits this violation.

NRC Evaluation of Licensee's Response

Since the licensee admits the violation, Violation C.1 remains as stated.

Restatement of Violation C.2.a

License Condition 17 requires that the Licensee transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of 10 CFR Part 71. 10 CFR 71.5(a) requires, in part, that each licensee who transports licensed material outside the confines of its plant or other place of use, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation in 49 CFR Parts 170-189.

49 CFR 172.300(a) requires that each person who offers for transport a package containing hazardous material mark each package in a manner required by Subpart D of Part 172. 49 CFR 172.301(a) requires, in part, that a package having a rated capacity of 110 gallons or less be marked with the proper shipping name and identification number (preceded by "UN" or "NA" as appropriate). 49 CFR 172.310(a) requires, in part, that in addition to any other markings, each package of radioactive material which conforms to the requirements for Type A or Type B packaging be plainly and durably marked with the words "TYPE A" or "TYPE B" as appropriate.

Contrary to the above, as of August 17, 1987, sources T-951 (4.65 curies of americium-beryllium) and CSV-650 (2 curies of cesium) had been transported and the transportation containers, with a rated capacity of less than 110 gallons, used to ship these sources were not marked with the proper shipping name and identification number or with the words "TYPE A" or "TYPE B" as appropriate.

Summary of Licensee's Response

The licensee admits this violation.

NRC Evaluation of Licensee's Response

Since the licensee admits the violation, Violation C.2.a remains as stated.

Restatement of Violation C.2.b

49 CFR 172.403 requires, in part, that unless excepted from labeling by Sections 173.421 through 173.425, each package of radioactive material be labeled, as appropriate, with a RADIOACTIVE WHITE-I, a RADIOACTIVE YELLOW-II or a RADIOACTIVE YELLOW-III label.

Contrary to the above, as of August 17, 1987, sources T-951 (4.65 curies of americium-beryllium) and CSV-650 (2 curies of cesium) had been transported and the packages were not labeled as required by 49 CFR 172.403, nor were they excepted from labeling.

This is a repeat violation.

Summary of Licensee's Response

The licensee admits this violation.

NRC Evaluation of Licensee's Response

Since the licensee admits the violation, Violation C.2.b remains as stated.

Restatement of Violation C.3.a

License Condition 18 requires, in part, that licensed material be possessed and used in accordance with statements, representations, and procedures contained in the application dated October 22, 1978 and letter dated January 16, 1985.

Section 2 of the procedures submitted with the license application requires that thermoluminescent dosimeter (TLD) Gamma-Neutron badges be processed on a quarterly basis.

Contrary to the above, as of August 17, 1987, employee badges for the fourth quarter of 1986 were not processed.

Summary of Licensee's Response

The licensee denies that TLD badges were not processed for the fourth quarter of 1986 and offers as evidence two reports from the TLD processor dated April 22 and April 24, 1987.

NRC Evaluation of Licensee's Response

The NRC has determined that the licensee processed TLD badges for the fourth quarter of 1986, and that the violation should be withdrawn. The NRC notes, however, that the badges for the fourth quarter of 1986 were worn through the first quarter of 1987 and therefore were not returned for processing on a quarterly basis, as required.

Restatement of Violation C.3.b

Section 3 of the procedures submitted with the license application requires that all sources of radioactivity be kept locked in the Licensee's Radioactive Material storage unless actually in use.

Contrary to the above, from August 15 until August 17, 1987, a 2 curie cesium-137 source and a 4.65 curie americium-beryllium source were not kept locked in the licensee's Radioactive Material storage but were stored on a truck.

Summary of Licensee's Response

The licensee admits this violation.

NRC Evaluation of Licensee's Response

Since the licensee admits the violation, Violation C.3.b remains as stated.

Restatement of Violation C.3.c

Section 8.5.3 of the procedures submitted with the license application states that the results of surveys of the job site will be recorded on the Radiation Survey Data Sheet.

Contrary to the above, no record of the results of surveys of job sites was maintained for the period December 19, 1986 through August 15, 1987.

Summary of Licensee's Response

The licensee admits this violation.

NRC Evaluation of Licensee's Response

Since the licensee admits the violation, Violation C.3.c remains as stated.

Restatement of Violation C.3.d

The licensee's letter of January 16, 1985, states that a specified individual had assumed the position of Radiation Safety Officer (RSO).

Contrary to the above, as of August 17, 1987, the specified RSO was no longer employed by the Licensee, and the duties of the RSO had been performed by an unauthorized RSO since about December 17, 1986.

Summary of Licensee's Response

The licensee admits this violation.

NRC Evaluation of Licensee's Response

Since the licensee admits the violation, Violation C.3.d remains as stated.

Restatement of Violation C.3.e

Figure #9 submitted with the license application diagrams the required configuration that neutron source holders shall have when being housed in shielded containers.

Contrary to the above, as of August 17, 1987, neutron source holders housed in shielded containers did not have the required configuration.

Summary of Licensee's Response

The licensee admits the violation.

NRC Evaluation of Licensee's Response

Since the licensee admits the violation, Violation C.3.e remains as stated.

Restatement of Violation C.4

10 CFR 20.201(b) requires that each licensee shall make or cause to be made such surveys as (1) may be necessary for the licensee to comply with the regulations in 10 CFR Part 20, and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

10 CFR 20.105(b)(1) and (2) require that no licensee possess, use, or transfer licensed material in such manner as to create in any unrestricted area radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of 2 millirems in any hour or 100 millirems in any 7 consecutive days.

Contrary to the above, from August 17, 1987 until approximately December 17, 1987, surveys had not been made of the unrestricted areas adjacent to the radioactive source storage area.

Summary of Licensee's Response

The licensee admits this violation, but notes that the cited dates of the violation are in error.

NRC Evaluation of Licensee's Response

The NRC has determined that the violation occurred, but agrees with the licensee that the dates as cited were erroneous. The citation is therefore corrected to read as follows:

Contrary to the above, from approximately December 17, 1986 until August 17, 1987, surveys had not been made of the unrestricted areas adjacent to the radioactive source storage area.

Restatement of Violation C.5

10 CFR 20.203(e) requires, in part, that areas in which licensed material in an amount exceeding 10 times the quantity specified in Appendix C of 10 CFR Part 20 are stored or used be conspicuously posted with a sign or signs bearing the words "CAUTION RADIOACTIVE MATERIALS" or "DANGER RADIOACTIVE MATERIALS."

Contrary to the above, as of August 17, 1987, the storage area which contained licensed material in an amount exceeding 10 times the quantity specified in Appendix C of 10 CFR Part 20 was not posted with a sign or signs bearing the words "CAUTION RADIOACTIVE MATERIALS" or "DANGER RADIOACTIVE MATERIALS."

Summary of Licensee's Response

The licensee admits that the storage area was not posted with signs that read "CAUTION RADIOACTIVE MATERIALS" or "DANGER RADIOACTIVE MATERIALS." However, the licensee asserts that the area was posted with a sign which read "Caution, radiation area," and that this sign had been approved by the NRC during a previous inspection in 1983. For this reason, the licensee claims that citation for this violation was "unnecessary."

NRC Evaluation of Licensee's Response

In 10 CFR Part 20 "Caution Radiation Area" and "Caution Radioactive Materials" or "Danger Radioactive Materials" have different and distinct meanings. 10 CFR 20.203(b) requires that a radiation area be posted with the words "Caution Radiation Area" and 10 CFR 20.202(b)(2) defines a radiation area as any area accessible to personnel in which there exists radiation at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirems or in any 5 consecutive days a dose in excess of 100 millirems. However, 10 CFR 20.203(e) requires that areas in which licensed materials in an amount exceeding 10 times the quantity specified in Appendix C are stored or used be posted "Caution Radioactive Materials" or "Danger Radioactive Materials." The licensee's storage area should have been posted in accordance with the requirements of 10 CFR 20.203(e). In addition, the NRC has no evidence that this sign had been approved during a previous inspection in 1983. Therefore, violation C.5 remains as stated.

Restatement of Violation C.6

10 CFR 20.207(a) requires that licensed materials stored in an unrestricted area be secured against unauthorized removal from the place of storage. As defined in 10 CFR 20.3(a)(17), an unrestricted area is any area to which access is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above, on August 17, 1987, a cesium-137 source (serial No. CSV-650) was stored in an open transportation container in a truck parked in an open garage, an unrestricted area, and was not secured against unauthorized removal.

Summary of Licensee's Response

The licensee admits this violation.

NRC Evaluation of Licensee's Response

Since the licensee admits the violation, Violation C.6 remains as stated.

Restatement of Violation C.7

10 CFR 20.401(a) requires that each licensee maintain records showing the radiation exposures of all individuals for whom personnel monitoring is required.

Contrary to the above, as of August 17, 1987, exposure records for the second quarter of 1987 were not maintained for employees for whom such monitoring was required.

Summary of Licensee's Response

The licensee admits this violation.

NRC Evaluation of Licensee's Response

Since the licensee admits the violation, Violation C.7 remains as stated.

II. Summary of Licensee's Request for Mitigation

The licensee argues that the proposed civil penalties are not needed to "improve management control over licensed activities," that the attitude by members of its company is not "complacent" towards compliance with NRC requirements, that, due to economic hardship, the balance of responsibility has been shifted to members of its organization who were not ready for additional loads of work, that due to different interpretation of requirements, Sections B, C.1, C.3.b, C.3.d, and C.5 were not clear to its new RSO, that it has spent an additional \$3,500 on a private consultant, and that it has had three management changes and should not be punished for the deeds of previous management. In addition, the licensee argues that civil penalties are reserved for gross negligence including disrespect for authority, and that as it has been receptive and quick to make corrections necessary for full compliance, the civil penalties are excessive and unwarranted. Moreover, the licensee argues that the civil penalties are detrimental to its survival.

NRC Evaluation of the Licensee's Request for Mitigation

It is management's responsibility to ensure that it is actively involved in its licensed program and is aware of NRC regulatory requirements and that NRC regulatory requirements are understood and followed. Confusion on the part of the licensee management is not a basis for mitigation.

As stated in the NRC's Enforcement Policy, civil penalties may be imposed for violations in order to emphasize the need for lasting remedial action and to deter future violations and are not reserved for gross negligence or disrespect for authority. With regard to the licensee's argument that it was quick to make corrections necessary for full compliance, the NRC has determined that the licensee's corrective actions were only such as would be expected, and did not provide a basis for mitigation of the civil penalties. Finally, although the Enforcement Policy states that the economic impact of civil penalties should not be such that it puts the licensee out of business or adversely affects a licensee's ability to safely conduct licensed activities, costs incurred by a licensee in obtaining professional consulting services in order to maintain its licensed activities in compliance with the Commission's regulations are not considered as a basis for civil penalty mitigation. The NRC has reviewed the licensee's corporate tax returns for 1985 and 1986 and financial statements for 1987. It is the NRC's conclusion that payment of the civil penalties would not create an undue hardship and adversely affect the licensee's ability to safely conduct licensed activities.

III. NRC Conclusion

In consideration of the licensee's responses to the NOV, the NRC staff has withdrawn Violation C.3.a. Concomitantly, the civil penalty for Violation C, which was \$500, has been reduced to \$450. The licensee has not provided an adequate basis for further mitigation of the civil penalties. The civil penalties for violations A and B, \$500 each, remain unchanged. Consequently, civil penalties in the amount of \$1,450 should be imposed.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
788 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

MAY 19 1988

Docket No. 030-11906
License No. 12-16941-01
EA 88-93

Professional Service Industries, Inc.
ATTN: Mr. James Ahlberg
Chief Operations Officer
510 East 22nd Street
Lombard, Illinois 60148

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT NO. 030-11906/88001(DRSS))

This refers to the NRC inspection that was conducted at your Flint, Michigan office and Saginaw, Michigan fieldsite, on March 17-22, 1988. The inspection included a review of the circumstances surrounding the temporary loss of a moisture-density gauge in Saginaw, Michigan. The loss was identified by your staff on March 17, 1988 and reported to the NRC that same day. During the inspection a violation of NRC requirements was identified. The report of the inspection was forwarded to you by letter dated April 12, 1988. The violation, its causes, and your corrective actions were discussed during an enforcement conference in the Region III office on April 11, 1988, between Mr. Leland Lewis and other members of your staff and Mr. C. E. Norelius and other members of the Region III staff.

The violation that is described in the enclosed Notice apparently resulted from an employee who became distracted and failed to properly secure a moisture-density gauge in its case before departing from a jobsite. Over the past two and a half years there have been four other events, in addition to the March 17, 1988 event, in which Professional Service Industries (PSI) employees have failed to maintain adequate surveillance and control over moisture-density gauges containing licensed material. On August 7, 1987 your staff notified the NRC that an unsecured moisture-density gauge containing licensed material had been stolen from the back of an open bed pickup truck. That gauge, which was never recovered, presented a potential for members of the public to receive radiation exposures in excess of NRC limits. That event resulted in a Notice of Violation for a Severity Level II violation, a Severity Level III violation, and two Severity Level IV violations and an assessment of a total of \$2,250 in civil penalties. In your response to that enforcement action, you admitted all four violations. On May 9, 1986 and again on January 29, 1987, your staff notified the NRC that moisture-density gauges containing licensed material had been run over by construction vehicles at field sites in Massilon, Ohio and Detroit, Michigan, respectively. Fortunately, although both gauges sustained significant physical damage, the radioactive sources remained intact.

MAY 19 1988

On November 15, 1985, one of your trucks was involved in a vehicle accident near Detroit, Michigan while transporting a moisture-density gauge. At the time of the accident, the shipping papers were inside the gauge storage case in the back of the truck rather than in the driver's compartment, as required. As a result, law enforcement personnel were unable to assess the full significance of the problem and this led to a serious disruption of vehicle traffic. That violation resulted in the imposition of a \$500 civil penalty.

The NRC recognizes that the events described above are small in comparison with the large number of moisture-density gauges possessed by your corporation at 100 field offices, 24 of which are authorized by NRC, and the more than 400,000 uses of these devices last year. Nevertheless, because of your size, the NRC believes it is essential that licensee management aggressively pursue, on a continuous basis, effective management control over all aspects of the moisture-density gauge program. These concerns were addressed during a March 18, 1988 telephone conversation between Mr. Leland Lewis, PSI Corporate Secretary, and Dr. Bruce S. Mallett of the NRC Region III staff and were documented in a Confirmatory Action Letter, dated March 18, 1988. That letter confirmed our understanding of actions you would take to notify all PSI offices of the March 17, 1988 gauge incident, retrain all gauge users, and prevent recurrence of this event. In a letter dated March 21, 1988, you responded to matters referenced in the March 18, 1988 Confirmatory Action Letter.

To emphasize the importance of these matters and the need to ensure continual implementation of effective management control over your radiation safety program, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Five Hundred Dollars (\$500) for the violation described in the enclosed Notice.

In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988) (Enforcement Policy), the violation described in the enclosed Notice has been categorized at a Severity Level III. In analyzing the safety significance of this incident when compared to the most recent previous incident which involved a lost moisture-density gauge, occurred on August 7, 1987 and resulted in a \$2,250 civil penalty, the NRC concluded that the temporary loss of the gauge did not represent "careless disregard". Furthermore, prompt action was taken to report the loss to the local authorities and the NRC. This notification at the local level resulted in recovery of the gauge. Additionally, you initiated prompt and extensive corrective action which included corporate-wide retraining (i.e., all 100 Branch Offices) of all gauge users, not just those regulated by the NRC (i.e., 24 Branch Offices). Nevertheless, in light of the significance of your prior enforcement history, full mitigation is not warranted.

In proposing a \$500 civil penalty now, we do not intend to minimize this matter. But for the employee and management response to this incident the penalty would have been larger. We are also concerned that you have not been effective in

MAY 19 1988

Professional Service Industries, Inc. 3

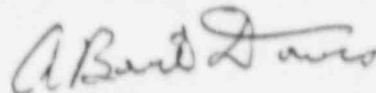
assuring that your employee comply with your procedures. Given the number of gauges you possess and the size of your program, we expect that you will be taking lasting and effective corrective action.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



A. Bert Davis
Regional Administrator

Enclosures:

1. Notice of Violation
and Proposed Imposition
of Civil Penalty
2. Inspection Report
No. 030-11906/88001(DRSS)

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Professional Service Industries, Inc.
Lombard, Illinois

Docket No. 030-11906
License No. 12-16941-01
EA 88-93

During an NRC inspection conducted on March 17-22, 1988, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988), 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 violation and associated civil penalty are set forth below:

10 CFR 71.5(a) requires each licensee who transports licensed material outside of the confines of its plant or other place of use to comply with the applicable requirements of the Department of Transportation (DOT) in 49 CFR Parts 170-189.

49 CFR 177.842(d) requires that packages of radioactive material be blocked and braced so that they cannot change position during conditions normally incident to transportation.

License Condition No. 24 requires that licensed materials be possessed and used in accordance with statements, representations, and procedures contained in referenced documents. An attachment to a referenced letter dated October 19, 1987, states, "While being transported . . . all gauges must be securely fastened in their case and chained to the rear of the vehicle. This not only limits movement, but also unauthorized removal."

Contrary to the above, on March 17, 1988, the licensee transported a Campbell Pacific Model MC-1 moisture-density gauge containing a nominal 8 millicurie cesium-137 sealed source and a 40 millicurie americium-241 sealed source without securing the device in its case or blocking and bracing the gauge to prevent the gauge from changing position. As a result, the gauge was temporarily lost after it fell onto a public road from the back of the licensee's vehicle.

This is a Severity Level III violation (Supplement VI)

(Civil Penalty - \$500)

Pursuant to the provisions of 10 CFR 2.201, Professional Service Industries, Inc. (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 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 under 10 CFR 2.201, the Licensee may pay the civil penalty by letter 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 amount of the civil penalty proposed above, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation 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.

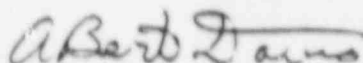
In requesting mitigation of the proposed penalty, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1988), should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, 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 provision 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.

MAY 19 1988

The responses to the Director, Office of Enforcement, noted above (Reply to a Notice of Violation, letter with payment of civil penalty, 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, 799 Roosevelt Road, Glen Ellyn, Illinois 60137.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Bert Davis
Regional Administrator

Dated at Glen Ellyn, Illinois
this 19th day of May 1988



UNITED STATES
NUCLEAR REGULATORY COM
WASHINGTON, D. C. 20555

JUN 03 1988

Docket No. 30-19652
License No. 49-21004-01
EA 88-107

Riverton Memorial Hospital - Health Trust, Inc.
ATTN: Mr. Bruce K. Birchell, Administrator
P.O. Box 1280
2100 W. Sunset Drive
Riverton, Wyoming 82501

Gentlemen:

SUBJECT: ORDER MODIFYING LICENSE AND NOTICE OF VIOLATION AND PROPOSED
IMPOSITION OF CIVIL PENALTY (NRC INSPECTION REPORT NO. 30-19652/88-01)

This refers to the special, unannounced inspection conducted on March 24, 1988, by Messrs. L. Ricketson and D. Powers at the Riverton Memorial Hospital in Riverton, Wyoming. During this inspection, violations of NRC requirements were identified and discussed with you and members of your staff at the conclusion of the inspection. An enforcement conference was also held in the Region IV office on April 15, 1988, with you and members of the Region IV staff to discuss these violations.

The violations identified include (1) an unauthorized use of licensed material, (2) failure to adequately instruct a worker, (3) failure of the Radiation Safety Committee to meet quarterly, (4) failure to notify the Commission within 30 days that authorized users had terminated employment, (5) failure to perform quarterly inventories of sealed sources, (6) failure to have a copy of the license on which a visiting physician was named, (7) failure to make a record of a diagnostic misadministration, and (8) failure to provide all required information on radiopharmaceutical administration records. Because of the number of violations identified and the licensee's inability to preclude repeat violations, these findings are of concern to the NRC. Collectively, they demonstrate a significant lack of management oversight and control over your licensed program.

To emphasize the importance of establishing adequate management control and oversight over licensed activities, I am issuing the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Five Thousand Dollars (\$5,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988) (Enforcement Policy), the violations described in the enclosed Notice have been categorized in the aggregate at a Severity Level III. The base value of a civil penalty for a Severity Level III violation is \$2500. The escalation and mitigation factors in the Enforcement Policy were considered. The base civil penalty amount has been increased by 100 percent because of inadequate corrective actions that allowed four previous violations to be repeated and two violations closely related to prior violations to occur, and because of prior past performance.

Riverton Memorial Hospital
Health Trust, Inc.

- 2 -

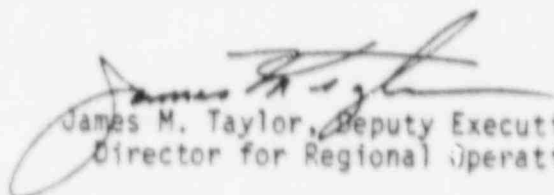
In addition, after careful review and consideration of the inspection findings, and your past compliance history and to assure that your radiation safety program is properly implemented, I have determined that it is in the interest of public health and safety to issue the enclosed Order Modifying License. This Order is immediately effective. The Order requires you to notify the NRC Region IV office of any employment termination of personnel directly involved in the nuclear medicine department's licensed activities and to obtain independent consulting services to perform audits of your program to evaluate adherence to NRC requirements, evaluate organization and staffing levels, observe and evaluate personnel performance, and assess quality and accuracy of records concerning licensed activities.

You are required to respond to this letter and enclosed documents and should follow the instructions specified in the enclosed Notice and Order when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action including license suspension is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed Order will be placed in the NRC's Public Document Room.

The response directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,


James M. Taylor, Deputy Executive
Director for Regional Operations

Enclosures:
Order Modifying License and
Notice of Violation and Proposed
Imposition of Civil Penalty

cc:
Wyoming Radiation Control Program Director

Wyoming Health Services, Inc.
L. Hooper, Regional Vice President
of Health Care
101 West Lake Avenue, Suite B
West Lake Village, California 91362

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of
RIVERTON MEMORIAL HOSPITAL -
HEALTH TRUST, INC.
Riverton, Wyoming 82501

}
}
}

Docket No. 30-19652
License No. 49-21004-01
EA 88-107

ORDER MODIFYING LICENSE, EFFECTIVE IMMEDIATELY

I

Riverton Memorial Hospital - Health Trust, Inc., Riverton, Wyoming, is the holder of specific byproduct material license No. 49-21004-01 issued by the Nuclear Regulatory Commission (Commission/NRC) pursuant to 10 CFR 30, 31, and 35. The license authorizes the licensee to use (1) any byproduct material specified by 10 CFR 35.100 and 35.200 (under the new revised 10 CFR 35, this requirement is under Subparts D, E, and F) for diagnostic procedures, (2) any byproduct material listed in 10 CFR 31.11 for in vitro studies, and (3) iodine-131 for diagnosis and treatment of hyperthyroidism and cardiac dysfunction. The license was originally issued on June 2, 1982; was most recently amended on July 22, 1987; was due to expire on May 31, 1987; and is currently in effect pursuant to a timely application for renewal in accordance with 10 CFR 2.109.

II

The licensee's facility was initially inspected on September 12, 1983. As a result of that inspection, the licensee was cited for a violation concerning its failure to conduct a quarterly Radiation Safety Committee meeting.

The licensee's facility was next inspected during a special, unannounced inspection conducted on September 30 and October 1, 1986. As a result of this inspection, numerous violations were discovered and, therefore, an enforcement conference was held with the licensee on November 4, 1986. At the enforcement conference, the licensee expressed concern over its ability to staff the hospital's nuclear medicine program with adequately trained personnel. Specifically, the licensee was searching for a staff radiologist who could also fill the vacant Radiation Safety Officer (RSO) function.

Subsequently, a Notice of Violation (NOV) and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated January 21, 1987. In the NOV, the licensee was cited for failure to (1) restrict the use of licensed materials to physicians who are authorized and qualified, (2) properly follow procedures for the assay of molybdenum-99, (3) have personnel wear dosimetry when working with licensed material, (4) conduct linearity tests on the dose calibrator, (5) conduct quarterly Radiation Safety Committee meetings, (6) conduct leak tests of sealed calibration sources, (7) conduct physical inventories of sealed calibration sources, and (8) notify NRC of the hospital's name change. The NRC letter of January 21, 1987, specifically highlighted the fact that the licensee had need for increased management attention to the radiation protection program. To emphasize the importance of complying with NRC requirements, a Two Thousand Five Hundred Dollar (\$2,500) Civil Penalty was proposed.

The licensee responded to the NOV and Proposed Imposition of Civil Penalty by letters dated February 12 and 13, 1987. After consideration of the licensee's response to the violations and request for mitigation of the Civil Penalty, the

NRC concluded that the violations did occur and that the Civil Penalty should not be mitigated. Consequently, the Civil Penalty was imposed by Order dated June 11, 1987. The licensee paid the Civil Penalty by letter dated June 19, 1987.

On March 24, 1988, members of the Region IV inspection staff again conducted a special, unannounced radiation safety inspection of the licensee's facility. Resulting from this inspection and an April 15, 1988, enforcement conference, the following violations were identified: (1) performance of a therapy procedure by an unauthorized individual (Repeat violation, Inspection No. 86-01) (2) failure of the Radiation Safety Committee to meet quarterly (Repeat violation, Inspection Nos. 83-01, 86-01), (3) failure to instruct a nuclear medicine department worker, (4) failure to perform a physical inventory of sealed sources (Repeat violation, Inspection No. 86-01), (5) failure to make a record of a diagnostic misadministration, (6) failure to secure a copy of a radioactive materials license on which a visiting physician was named, (7) failure to include all required information on records for radiopharmaceutical administrations, and (8) failure to notify NRC of authorized users who were named on the license but who were no longer in the licensee's employ. Several of these violations were repeat violations.

At the April 15, 1988, enforcement conference, the licensee again expressed concern regarding its inability to secure adequately trained personnel to staff the nuclear medicine department. In discussing this concern, the NRC staff observed that the licensee's representatives present at the Enforcement

Conference were also unaware of the NRC's rules and regulations. In particular, the radiologist who had been serving as RSO for about a year was unfamiliar with the license and its provisions. Both the administrator and the radiologist were unfamiliar with the mechanics of seeking an amendment to the license, neither was aware of the current license amendment, and both were confused as to whether their consultant or the licensee was processing a request to amend the license. Moreover, the chief technologist had been demoted about 6 months previous to the inspection, and that position had been filled by an interim supervisor who recently gave notice of his intent to leave the licensee's employ. The only other qualified nuclear medicine technologist had terminated her employment with the licensee following the March 24, 1988, inspection.

Prior to the April 15, 1988, enforcement conference, a Confirmation of Action Letter (CAL) was issued on March 29, 1988. The CAL confirmed the licensee's commitment to establish written controls, to notify the staff that they were specifically precluded from conducting therapeutic administrations, to submit specific information on a departmental meeting, and to submit the qualifications of the RSO in order that he could be authorized to conduct therapeutic procedures. The licensee has subsequently fulfilled these commitments.

III

Based on (1) the NRC inspections of September 30 and October 1, 1986, and March 24, 1988, that identified numerous violations, several of which were repeat violations, and (2) the licensee's admitted inability to staff the

nuclear medicine department with adequately trained personnel, NRC concludes that the radiation safety program at Riverton Memorial Hospital has not been properly implemented. Consequently, without the further action ordered here, I lack the reasonable assurance that the health and safety of the public will be adequately protected. Accordingly, immediate action is required to provide assurance that licensed activities will be properly supervised and conducted. Therefore, I have determined, pursuant to 10 CFR 2.204, that the public health, safety, and interest require that the license should be modified, as described below, effective immediately, and that no prior notice is required.

IV

Accordingly, pursuant to Sections 81, 161(b), (i), and (o), and 182 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.204 and 10 CFR Parts 30 and 35, IT IS HEREBY ORDERED, THAT EFFECTIVE IMMEDIATELY:

License No. 49-21004-01 is modified to require that:

- A. The licensee notify the NRC Region IV office by telephone prior to the effective date of any employment termination of any personnel directly involved in the nuclear medicine department's licensed activities. For any employment termination where licensee has had less than 24 hours prior notice, the licensee will notify the NRC Region IV office promptly but no later than 12 noon of the next business day after its becoming aware of such personnel's departure. The personnel subject to this notification

requirement include (1) the RSO, (2) authorized users, (3) the interim nuclear medicine department supervisor, and (4) technologists who are who are currently involved in, or subsequent to the date of this Order, technologists who are in the future involved in licensed activities.

- B. An independent party, qualified in the area of radiation safety, perform quarterly audits of the Radiation Safety Program. The audits shall continue for a period of 1 year. The credentials of the independent party and the proposed audit program shall be submitted to NRC Region IV for review and approval within 30 days of the date of this order.

Audits shall be conducted for the purpose of evaluating the effectiveness of the radiation safety program in assuring adherence to NRC requirements and safe performance of licensed activities. These audits shall include, at a minimum:

1. Assessment of management control and oversight of the program.
2. Evaluation of the adequacy of staffing levels, training and qualification of personnel involved in licensed activities, and implementation of the program.
3. Observation and evaluation of the performance of personnel engaged in licensed activities.
4. Assessment of the quality and accuracy of records required to be maintained concerning licensed activities.

The first such independent audit shall be conducted within 1 month of the NRC's notification to the licensee of NRC's approval of the audit program. The results of each audit shall be simultaneously provided to the Hospital Administrator and the Regional Administrator, NRC Region IV, within 2 weeks of completion of the audit. The hospital shall provide to the Regional Administrator, NRC Region IV, within 30 days of receipt of the results of each audit, a description of the corrective actions taken for each recommendation by the independent party and justification for any recommendation not accepted.

The Regional Administrator, NRC Region IV, may in writing, relax or rescind any of these conditions for good cause shown.

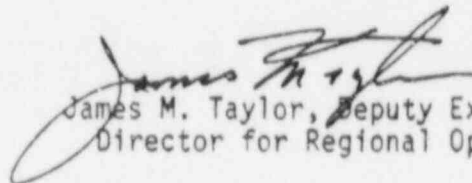
V

The licensee or any other person adversely affected by this Order may request a hearing within 30 days after issuance of this Order. Any answer to this Order or any request for hearing shall be submitted to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington 20555. Copies shall also be sent to the Assistant General Counsel for Enforcement at the same address and to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 1000, Arlington, Texas 76011. If a person other than the licensee requests a hearing, that person shall set forth with particularity the manner in which the petitioner's interest is adversely affected by this Order and should address the criteria set forth in

10 CFR 2.714(d). Upon the failure of the licensee to answer or request a hearing within the specified time, this Order shall be final without further proceedings. AN ANSWER TO THIS ORDER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

If a hearing is requested, the Commission will issue an order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


James M. Taylor, Deputy Executive
Director for Regional Operations

Dated at Rockville, Maryland,
this 3rd day of June 1988.

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Riverton Memorial Hospital
Health Trust, inc.
Riverton, Wyoming

Docket No. 30-19652
License No. 49-21004-01
EA 88-107

During an NRC inspection conducted on March 24, 1988, 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 (1988), 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. Condition 12 of License No. 49-21004-01 limits the named user (physician) to specific uses of licensed materials for which the physician is authorized.

Contrary to the above, on August 28, 1987, the sole user (physician), who was the Radiation Safety Officer, was responsible for the administration of a therapeutic dose of 15 millicuries of iodine-131. The physician was not authorized for this use.

- B. 10 CFR 19.12 requires that all individuals working in or frequenting any portion of a restricted area shall be instructed in the health protection problems associated with exposure to radioactive materials, in precautions to minimize such exposure, and in the purposes and functions of protective devices employed. This regulation also requires that individuals be instructed in, and instructed to observe, the applicable provisions of Commission regulations and licenses, and shall be instructed of their responsibility to report promptly to the licensee any condition which may lead to or cause a violation of Commission regulations and licenses or any condition which may lead to unnecessary exposure to radiation or radioactive materials.

Contrary to the above, as of March 24, 1988, a nuclear medicine technologist, who had been employed by the hospital for about 6 months, had not been instructed in accordance with the requirements of the above regulation.

- C. 10 CFR 35.22(a)(2) requires that the licensee's Radiation Safety Committee meet at least quarterly.

Contrary to the above, the Radiation Safety Committee had met only once during the period October 1, 1986 to March 24, 1988.

This is a repeat violation.

- D. 10 CFR 35.14 requires a licensee to notify the Commission by letter within 30 days when an authorized user permanently discontinues performance of duties under the license.

Contrary to the above, as of March 24, 1988, the licensee had not notified the Commission that six of the seven individuals authorized as users by the license had not practiced in the licensee's facility subsequent to May 1987 and were considered by the licensee to have permanently left the licensee's employ.

- E. 10 CFR 35.59(g) requires that a licensee in possession of a sealed source shall conduct a quarterly physical inventory of all such sources in its possession.

Contrary to the above, as of March 24, 1988, licensee had not performed quarterly inventories since September 24, 1987 for three sealed sources in their possession.

This is a repeat violation.

- F. 10 CFR 35.27(a) allows a licensee to permit any visiting authorized user to use licensed material for medical use under the terms of the licensee's license for 60 days if certain requirements are fulfilled. 10 CFR 35.27(a)(2) requires that the licensee have a copy of a license issued by the Commission or an Agreement State that identifies the visiting authorized user by name as an authorized user.

Contrary to the above, a visiting physician performed nuclear medicine procedures on February 9 and 11, 1988, and March 7 and 8, 1988, and a copy of the license on which the visiting physician was listed was not obtained by the licensee to assure that the physician was authorized for the procedures performed prior to the dates of use.

- G. 10 CFR 35.2 defines a misadministration to include a diagnostic dosage of a radiopharmaceutical differing from the prescribed dosage by more than 50 percent. 10 CFR 35.33(c) requires that when a misadministration involves a diagnostic procedure, the Radiation Safety Officer shall promptly investigate its cause, make a record for NRC review, and retain the record as directed by 10 CFR 35.33(d).

Contrary to the above, no record was prepared for a diagnostic misadministration that occurred October 14, 1987, in which a child was given an adult dose of Technetium-99m.

- H. 10 CFR 35.53(c) requires that a licensee, after measuring the activity of each radiopharmaceutical dosage, retain a record of the measurements including certain information. 10 CFR 35.53(c)(2) requires that the record include the patient's name. 10 CFR 35.53(c)(3) requires that the record include the prescribed dosage and the activity of the dosage at the time of measurement, or a notation that the total activity is less than 10 microcuries. 10 CFR 35.53(c)(5) requires that the record show the initials of the individual who made the record.

Contrary to the above, records of administrations for the period May 1987 through March 1988 did not include the prescribed dosage as well as the measured dosage, or a notation that the total activity was less than 10 microcuries; the record of a bone scan performed on October 9, 1987, did not include the name of the patient; and the record of a bone scan performed on October 14, 1987, did not include initials of the individual who made the record.

Collectively, these violations have been categorized as a Severity Level III problem (Supplement VI).

Cumulative Civil Penalty - \$5,000 (assessed equally among the violations).

Pursuant to the provisions of 10 CFR 2.201, Riverton Memorial Hospital - Health Trust, Inc. (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 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 penalty by letter 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 amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation 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, such answer may request remission or mitigation of the penalty.

Notice of Violation

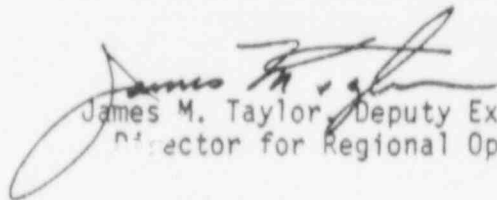
- 4 -

In requesting mitigation of the proposed penalty, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1988), 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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV.

FOR THE NUCLEAR REGULATORY COMMISSION


James M. Taylor, Deputy Executive
Director for Regional Operations

Dated at Rockville, Maryland
this 3rd day of June 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

MAY 27 1989

Docket No. 030-11136
License No. 34-16495-01
EA 88-118

Southern Ohio Coal Company
ATTN: Mr. J. F. Tompkins
Vice President
General Manager
Post Office Box 490
Athens, Ohio 45701

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT NO. 030-11136/88001(DRSS))

This refers to the NRC inspection that was conducted at your office near Athens, Ohio on April 15, 1988. The inspection included a review of the circumstances surrounding the removal and loss of a device containing a nominal 35 millicurie cesium-137 sealed source from a coal transfer chute at the Gavin Power Plant in Cheshire, Gallia County, Ohio. The loss was identified by your staff on March 30, 1988 and was reported to the NRC on March 31, 1988. During the inspection two violations of NRC requirements were identified. The report of the inspection was forwarded to you by letter dated April 28, 1988. The violations, their causes, and your corrective actions were discussed during an enforcement conference in the Region III office on April 27, 1988, between Mr. A. J. Hillard, Acting Vice President, and other members of your staff and Mr. C. E. Norelius and other members of the Region III staff.

The violations described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) involve failures to: (1) maintain adequate control over a device containing a 35 millicurie cesium-137 radioactive source and (2) conduct a physical inventory every six months to account for the radioactive source. Use of the device was discontinued more than ten years ago and the device was last leak tested in March, 1985. Sometime between 1985 and 1988 the device was apparently removed in an unauthorized manner. It was discovered missing by the licensee on March 30, 1988. Although the routine six month physical inventory would not have prevented this loss, it would have afforded many opportunities for management to discover sooner that the device containing the radioactive source was missing. This would have increased the chances of recovery. The NRC finds these violations of particular concern because the radioactive source may have been lost into the public domain.

MAY 27 1988

To emphasize the importance of conducting an effective radiation safety program which includes timely inventories and maintaining control over all radioactive sources in your possession, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Seven Hundred and Fifty Dollars (\$750) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988) (Enforcement Policy), the violations described in the enclosed Notice have been categorized at a Severity Level III. The base value of a civil penalty for a Severity Level III violation is \$500. The escalation and mitigation factors in the Enforcement Policy were considered. The base civil penalty amount has been increased by 50 percent because your corrective actions after identification of this loss were not promptly initiated and were only minimally acceptable. Initial efforts to locate the missing device containing the radioactive source did not include contacting licensed gauge companies who might have removed the device, individuals who were authorized users under the license, or individuals who had worked on the coal transfer chute on which the device was mounted. Such actions could have led to the recovery of the missing radioactive source or an awareness of its ultimate disposition.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

MAY 27 1989

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, Pub.L., No. 96-511.

Sincerely,

for 
A. Bert Davis
Regional Administrator

Enclosures:

1. Notice of Violation and
Proposed Imposition of
Civil Penalty
2. Inspection Report
No. 030-11136/88001(DRSS)

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Southern Ohio Coal Company
Athens, Ohio

Docket No. 030-11136
License No. 34-16495-01
EA 88-118

During an inspection conducted on April 15, 1988, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988), 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. License Condition No. 14 requires that removal from service of devices containing sealed sources be performed by specifically named licensee employees or by persons specifically licensed by the Commission or an Agreement State to perform such services.

Contrary to the above, between March 1985 and March 30, 1988, a device containing a nominal 35 millicurie cesium-137 sealed source was removed from service by a person who was neither a specifically named licensee employee nor specifically licensed by the Commission or an Agreement State to perform such services.

- B. License Condition No. 15 requires that the licensee conduct a physical inventory every six months to account for all sources and/or devices received and possessed under the license.

Contrary to the above, the licensee did not conduct a physical inventory every six months to account for a Kay Ray Model 7062 source holder which contained a nominal 35 millicurie cesium-137 sealed source, a source received and possessed under the license. No inventory was conducted between 1985 and March 30, 1988.

Collectively, these violations have been classified as a Severity Level III problem (Supplement VI).

Cumulative Civil Penalty - \$750 (assessed equally between the violations).

Pursuant to the provisions of 10 CFR 2.201, Southern Ohio Coal Company 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 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, Southern Ohio Coal Company may pay the civil penalty 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 amount of the civil penalty proposed above, or may protest imposition of the civil penalty 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 penalty will be issued. Should the licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, 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, such answer may request remission or mitigation of the penalty.

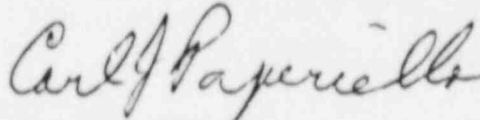
In requesting mitigation of the proposed penalty, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1988), should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, 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.

MAY 27 1988

The responses to the Director, Office of Enforcement, noted above (Reply to a Notice of Violation, letter with payment of civil penalty, 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, 799 Roosevelt Road, Glen Ellyn, Illinois 60137.

FOR THE NUCLEAR REGULATORY COMMISSION



for

A. Bert Davis
Regional Administrator

Dated at Glen Ellyn, Illinois
this 27 day of May 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
SPRINGFIELD, ILLINOIS 60137

January 29, 1988

Docket No. 030-11623
License No. 24-04581-19
EA 87-234

St. Louis University
ATTN: Arthur E. Baue, M.D.
Vice President
3556 Caroline St.
St. Louis, MO 63104

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT NO. 030-11623/87001(DRSS))

This refers to the inspection conducted on December 3 through 11, 1987. The inspection included a review of the circumstances surrounding a whole body overexposure that was identified by your staff on October 27, 1987, and reported to the NRC on November 23, 1987. The report of the inspection was sent to you by letter dated December 24, 1987. During the inspection, violations of NRC requirements were identified. The violations, the causes, and your corrective actions were discussed during an enforcement conference in the Region III office on December 30, 1987, between Mr. S. Coburn and other members of your staff and Mr. A. Bert Davis and other members of the Region III staff.

The violations that are described in the enclosed Notice include: (1) permitting an individual to receive a whole body dose of at least 7.5 rems during the fourth calendar quarter of 1987, (2) failing to assess the radiation hazards or observe three separate warning lights which would have alerted the individuals, prior to entering the room, that the 8990 curie cobalt-60 teletherapy source was in an exposed position, and (3) failing to report to the NRC within 24 hours that an overexposure event had occurred. The violations occurred while the individual and the Radiation Safety Officer (RSO) were making area surveys around the teletherapy room while the door interlock was bypassed and the therapy room door was open.

These violations demonstrate a careless lack of attention to detail, not only by the individual who received the overexposure while he was working with the teletherapy unit, but also by the RSO who accompanied that individual when he entered the teletherapy room. These individuals failed to make adequate assessments or take additional precautions in lieu of the disabled door interlock to ensure that the source returned to its shielded position prior to entry.

Immediately after the exposure event, the individual and the RSO incorrectly assessed their exposure at 3.5 rems and 2 rems, respectively. That assessment was not based on a physical reenactment of the event. The NRC is particularly concerned that no prompt action was taken to (1) perform a physical reenactment of the event, (2) promptly submit personnel dosimetry for processing,

(3) request emergency processing of personnel dosimetry, (4) restrict the individuals from working in areas where additional exposure could be received, or (5) assess the causal factors involved in the event and implement action to assure those factors were addressed.

On November 18, 1987, Radiation Detection Company informed the licensee that the individual had received a 7.5 rem whole body dose. The individual who received the dose, the RSO, and the Chairman of the Radiation Safety Committee, who did not learn of the high badge reading until November 20, 1987, elected to wait until R. S. Landauer Company processed the TLD ring badges to see if the ring badge report was in agreement with the whole body badge report. On November 23, 1987, R. S. Landauer Company notified the licensee that one of the ring badges showed a dose of 9.08 rem. The RSO reported the overexposure to the NRC on November 23, 1987.

To emphasize the importance of proper assessment of radiation hazards and attention to warning devices during performance of hazardous activities, immediate involvement by appropriate licensee personnel when a significant radiological event occurs, the performance of an adequate and timely evaluation of the event, and the immediate processing of personnel dosimetry after an event, I have been authorized, after consultation with the Deputy Executive Director for Regional Operations, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Six Thousand Dollars (\$6,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), the violations described in the enclosed Notice have been categorized as a Severity Level II problem. The escalation and mitigation factors in the Enforcement Policy were considered and the base civil penalty amount for these violations has been increased by 50 percent because the licensee's corrective actions were not prompt and were only minimally acceptable.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response you should document the specific actions taken and any additional action you plan to prevent recurrence. In particular, describe how you will ensure that, in the future, appropriate licensee personnel will become promptly involved in evaluating radiological events, personnel dosimetry will be processed immediately after an event occurs, and your radiation safety staff will be required to respond promptly to radiological events of this magnitude. In addition, address what measures you have taken, if any, to ensure that the personnel involved in this event have an increased level of attention to safety in performance of duties with licensed materials. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC Public Document Room.

January 29, 1988

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

Original signed by

A. Bert Davis

A. Bert Davis
Regional Administrator

Enclosures:

1. Notice of Violation
and Proposed Imposition
of Civil Penalty
2. Inspection Report
No. 030-11623/87001(DRSS)

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

St. Louis University
St. Louis, MO

Docket No. 030-11623
License No. 24-04581-19
EA 87-234

During an NRC inspection conducted on December 3 through 11, 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 penalty are set forth below:

- A. 10 CFR 20.101(a) requires that no licensee possess, use, or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter from radioactive material a total whole body occupational dose in excess of 1.25 rems.

Contrary to the above, during the fourth calendar quarter of 1987, an individual using licensed material in a restricted area received a whole body occupational dose of at least 7.5 rems.

- B. 10 CFR 20.201(b) requires that each licensee make such surveys as (1) may be necessary for the licensee to comply with the regulations in Part 20, and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As defined in 10 CFR 20.201(a), "Survey" means an evaluation of the radiation hazards incident to the use or presence of radioactive materials under a specific set of conditions.

Contrary to the above, the licensee did not make a survey (evaluation) of a radiation hazard to assure compliance with 10 CFR 20.101(a) in that an individual entered a teletherapy room on October 27, 1987, while an 8990 curie cobalt-60 source was in an exposed position and did not evaluate the radiation hazard by surveying the radiation field or by observing the warning light on the control panel, the warning light above the entrance door to the teletherapy room or the Primealert warning light in the maze entrance to the teletherapy room.

- C. 10 CFR 20.403(b) requires that a licensee within 24 hours of discovery of an event, report any event involving licensed material possessed by the licensee that may have caused or threatens to cause exposure of the whole body of any individual to 5 rems or more of radiation.

Contrary to the above, on October 27, 1987, the licensee was aware of an overexposure event that threatened to cause whole body exposure in excess of 5 rems and failed to report the event to the NRC within 24 hours. Subsequently, on November 18, 1987, the licensee was informed by its badge processor, Radiation Detection Company, that an individual involved in that event had received a whole body dose of 7.5 rems; however, the licensee did not report the event to the NRC until November 23, 1987.

Collectively, these violations have been classified as a Severity Level II problem (Supplement IV).

Cumulative Civil Penalty - \$6,000 (assessed equally among the violations).

Pursuant to the provisions of 10 CFR 2.201, St. Louis University (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 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 under 10 CFR 2.201, the Licensee may pay the civil penalty by letter 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 amount of civil penalty proposed above, or may protest imposition of the civil penalty 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 penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, the answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation(s) 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 the answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, 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 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 penalty, 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, DC 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, 799 Roosevelt Road, Glen Ellyn, Illinois, 60137.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Bert Davis
Regional Administrator

Dated at Glen Ellyn, Illinois
this 21st day of January 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 03 1988

Docket No. 030-11623
License No. 24-04581-19
EA 87-234

St. Louis University
ATTN: Arthur E. Baue, M.D.
Vice President
3556 Caroline Street
St. Louis, Missouri 63104

Gentlemen:

SUBJECT: ORDER IMPOSING A CIVIL MONETARY PENALTY

This refers to your letter dated February 16, 1988, in response to the Notice of Violation and Proposed Imposition of Civil Penalty (Notice) sent to you by our letter dated January 29, 1988. Our letter and Notice described three violations categorized collectively as a Severity Level II problem. The violations were identified during an inspection which was conducted on December 3-11, 1987, in response to a whole body overexposure that was identified by your staff on October 27, 1987 and reported to the NRC on November 23, 1987.

To emphasize the importance of proper assessment of radiation hazards and attention to warning devices during performance of hazardous activities, immediate involvement by appropriate licensee personnel when a significant radiological event occurs, the performance of an adequate and timely evaluation of the event, and the immediate processing of personnel dosimetry after an event, a civil penalty of Six Thousand Dollars (\$6,000) was proposed. The proposed civil penalty had been escalated by 50 percent because your corrective actions were not prompt and were only minimally acceptable.

In your response you admitted the three violations occurred as described in the Notice and you offered several reasons why the University believes that the imposition of the \$6,000 civil penalty is excessive when all the circumstances of the alleged violations are considered. We note your views on the conduct of your employees. We do not find it acceptable for highly qualified individuals during the performance of hazardous activities to not follow basic radiation safety practices.

After consideration of your response, we have concluded, for the reasons given in the Appendix attached to the enclosed Order Imposing a Civil Penalty, that you did not provide a sufficient basis for mitigation or remission of the proposed civil penalty. Accordingly, we hereby serve the enclosed Order on St. Louis University imposing a civil monetary penalty in the amount of Six Thousand Dollars (\$6,000).

After reviewing the corrective actions set forth in your February 16, 1988 letter, we have concluded that you did not adequately address several of the NRC's concerns which were described in our January 29, 1988 letter. The


St. Louis University

- 2 -

specific deficiencies in your response are noted in the "NRC Evaluation of The Licensee's Corrective Actions" which is contained in Enclosure 2. You are required to respond to these concerns within 30 days of the date of this Order.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room.

Sincerely,



James Lieberman, Director
Office of Enforcement

Enclosures:

1. Order Imposing Civil Monetary Penalty w/Appendix
2. NRC Evaluation of the Licensee's Corrective Actions

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of
St. Louis University
St. Louis, Missouri

)
)
)
)

Docket No. 030-11623
License No. 24-04581-19
EA 87-234

ORDER IMPOSING CIVIL MONETARY PENALTY

I

St. Louis University is the holder of Byproduct Material License No. 24-04581-19 issued by the Nuclear Regulatory Commission (NRC/Commission) on January 26, 1976 and renewed in its entirety on September 9, 1981. The license authorizes the licensee to use a teletherapy unit for treatment of humans in accordance with the conditions specified therein.

II

An inspection of the licensee's activities was conducted on December 3-11, 1987. The results of this inspection indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated January 29, 1988. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalty proposed for the violations. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalty (Notice) by letter dated February 16, 1988. In its response, the licensee admits the violations occurred as described in the Notice and offered several reasons why the University believes that the imposition of the \$6,000 civil penalty is excessive when all the circumstances of the alleged violations are considered.

III

After consideration of the licensee's response and the statements of fact, explanation, and argument for mitigation contained therein, the NRC staff has determined, as set forth in the Appendix to this Order, that the violations occurred as stated and that the penalty proposed for the violations designated in the Notice of Violation and Proposed Imposition of Civil Penalty should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of Six Thousand Dollars (\$6,000) within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

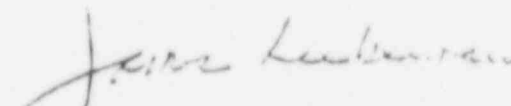
The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing shall be clearly marked as a "Request for an Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555. A copy of the hearing request also shall be sent to the Assistant

General Counsel for Enforcement, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to the Regional Administrator, U.S. Nuclear Regulatory Commission, 799 Roosevelt Road, Glen Ellyn, Illinois 60137.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issue to be considered at such a hearing shall be whether this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


James Lieberman, Director
Office of Enforcement

Dated at Rockville, Maryland
this day of May 1988.

APPENDIX

EVALUATIONS AND CONCLUSIONS

On January 29, 1988, a Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was issued to St. Louis University for violations identified during a special NRC inspection. St. Louis University responded to the Notice on February 16, 1988. During the inspection, which was conducted in response to a reported employee overexposure obtained from a cobalt-60 teletherapy unit, three 10 CFR Part 20 violations were identified. In its response, the licensee admits the violations occurred as described in the Notice but offers several reasons why the University believes that the imposition of the \$6,000 civil penalty is excessive when all the circumstances of the alleged violations are considered. The NRC's evaluation and conclusion regarding the licensee's response are as follows:

Restatement of the Violations

- A. 10 CFR 20.101(a) requires that no licensee possess, use, or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter from radioactive material a total whole body occupational dose in excess of 1.25 rems.

Contrary to the above, during the fourth calendar quarter of 1987, an individual using licensed material in a restricted area received a whole body occupational dose of at least 7.5 rems.

- B. 10 CFR 20.201(b) requires that each licensee make such surveys as (1) may be necessary for the licensee to comply with the regulations in Part 20 and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As defined in 10 CFR 20.201(a), "Survey" means an evaluation of the radiation hazards incident to the use or presence of radioactive materials under a specific set of conditions.

Contrary to the above, the licensee did not make a survey (evaluation) of a radiation hazard to assure compliance with 10 CFR 20.201(a) in that an individual entered a teletherapy room on October 27, 1987, while an 8990 curie cobalt-60 source was in an exposed position and did not evaluate the radiation hazard by surveying the radiation field or by observing the warning light on the control panel, the warning light above the entrance door to the teletherapy room or the Primealert warning light in the maze entrance to the teletherapy room.

- C. 10 CFR 20.403(b) requires that a licensee within 24 hours of discovery of an event, report any event involving licensed material possessed by the licensee that may have caused or threatens to cause exposure of the whole body of any individual to 5 rems or more of radiation.

Contrary to the above, on October 27, 1987, the licensee was aware of an overexposure event that threatened to cause whole body exposure in excess of 5 rems and failed to report the event to the NRC within 24 hours. Subsequently, on November 18, 1987, the licensee was informed by its badge processor, Radiation Detection Company, that an individual involved in that event had received a whole body dose of 7.5 rems; however, the licensee did not report the event to the NRC until November 23, 1987.

Collectively, these violations have been classified as a Severity Level II problem (Supplement IV).

Cumulative Civil Penalty - \$6,000 (assessed equally among the violations).

Summary of Licensee's Response

The licensee, in its response, admits the violations. However, the licensee presents reasons why the civil penalty is excessive. The reasons are stated below together with the NRC's evaluation.

1. Licensee's Assertions

The University rejects the contention that its employees performed in a "careless" manner and that the followup actions were anything but appropriate in view of the information available at the times the various actions were taken. The judgment of the NRC staff does not take into account the circumstances of the incident, long term performance of personnel nor good faith efforts by involved persons to deal appropriately with the matter.

The University performed both an informal and formal investigation of this incident and developed a series of corrective measures prior to any actions taken by the NRC.

NRC Evaluation

The NRC used the word "careless" to describe the failure of individuals to follow basic radiation safety practices that would have prevented an overexposure of an individual. Before concluding that the involved individuals were careless, the NRC carefully considered that a radiation therapy physicist and the University Radiation Safety Officer, probably the two most knowledgeable individuals in the area of radiation safety, disabled a door interlock switch which was part of an essential safety system to control access to the teletherapy treatment room. These individuals then entered the room without verifying that an exposed 8990 curie cobalt-60 source had been returned to a safe shielded position, without making routine direct reading radiation surveys to ensure that it was safe to enter the room, and without observing several warning lights. After considering these factors, the NRC concluded that these failures to follow basic radiation safety practices clearly demonstrated acts of carelessness.

The staff examined the past performance of the licensee, the corrective actions to prevent recurrence and the licensee's identification and reporting of the problem. As stated in the NOV, the NRC concluded that the licensee's corrective actions were not prompt and were only minimally acceptable.

2. Licensee's Assertions

The University believes that the imposition of the \$6,000 civil penalty is excessive when all of the circumstances of the alleged violations are considered. In addition, the penalty is nonproductive.

NRC Evaluation

The proposed civil penalty was based on a 50 percent increase in the base amount of the civil penalty for a Severity Level II violation in accordance with the NRC's Enforcement Policy (Appendix C, 10 CFR Part 2). The penalty was raised 50 percent due to the NRC's assessment that the licensee's corrective actions to prevent recurrence were not prompt, and were only minimally acceptable. The penalty was proposed to send a message that the NRC considers this violation as a serious matter and to emphasize the need to take timely and comprehensive corrective actions. In its reply to the Notice of Violation, the licensee provides no new or additional information which would warrant mitigation of the civil penalty proposed. Furthermore, as indicated in Enclosure 2 to the letter transmitting this Order, further clarification is necessary to provide assurance that the corrective action will be effective.

NRC's Conclusion

The NRC staff has concluded that the licensee has not provided a sufficient basis for mitigation of the proposed \$6,000 civil penalty. Accordingly, a civil penalty in the amount of \$6,000 is imposed.

Enclosure 2

NRC EVALUATION OF THE LICENSEE'S CORRECTIVE ACTIONS

Licensee's Corrective Actions

In its February 16, 1988 response, the licensee described corrective actions that it had taken and would take in the future. These actions are as follows:

1. Since the teletherapy head is maximally loaded at this time and the necessary surveys have been completed, further surveys of the kind conducted will be justified only if there is clinical need to create a treatment geometry significantly different from those which have already been evaluated;
2. Any plans to conduct surveys with safety features overridden or disabled should be conducted only by designated qualified personnel and only with the prior knowledge and approval of the Committee Chairman or his designee.
3. A written plan for such surveys should be developed which includes assignment of responsibility to only one person for operation of the teletherapy console.
4. During any procedure which may involve high radiation fields, direct reading personnel monitors should be employed and read during the course of, and at the conclusion of, the procedure.
5. Any exposures estimated by calculation to be within 50% of the regulatory limits specified by 10 CFR Part 20.101(a) should be confirmed as soon as possible from personnel monitoring service.
6. The audible alarm feature of both the interior and exterior beam ON indicators should be activated during surveys when safety devices are disabled.
7. The visual beam ON indicator at the end of the entrance maze has been relocated to eye level.

NRC Evaluation of the Licensee's Corrective Actions

The NRC has reviewed the licensee's response to the Notice and has concluded that additional information is required for several of the licensee's corrective actions.

1. With regard to corrective action, Item 2, the licensee should describe how its procedures will be modified to ensure that, before any safety features are overridden or disabled, the matter will be reviewed by the entire Radiation Safety Committee and written approval of the committee will be required before proceeding.
2. With regard to corrective action, Items 3, 4, and 6, the licensee should verify that these corrective actions will be implemented, not that they should be implemented.

3. With regard to corrective action, Item 5, the licensee should verify that any entry into a high radiation area that results in an unplanned radiation dose will result in the immediate processing of personnel monitoring devices. It should be noted that it was the licensee's inability to make an accurate estimate or calculation of a radiation dose that resulted in the late reporting of an overexposure event that occurred on October 27, 1987.

II.B. MATERIAL LICENSEES, SEVERITY LEVEL III VIOLATION,
NO CIVIL PENALTY



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

26 MAY 1988

Docket No. 30-02618
License No. 31-00786-02
EA 88-115

Veterans Administration Medical Center
ATTN: Mr. Richard Droske
Director
3495 Bailey Avenue
Buffalo, New York 14215

Gentlemen:

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report No. 30-02618/88-001)

This letter refers to the NRC inspection conducted on April 5-7, 1988, at your facility in Buffalo, New York, to review the circumstances associated with a violation identified by your staff and reported to the NRC. The violation involved a radiation exposure in excess of the regulatory limit to the left hand and to the skin on the back of the neck of a senior investigator from the State University of New York at Buffalo (University) who was working at your facility on a collaborative project with one of your investigators. This exposure occurred during the first calendar quarter of 1988.

During the inspection, other violations of NRC requirements were identified, including: (1) performance of surveys at a frequency less than required; (2) transfer and use of material in an unauthorized manner; (3) administration of a dose of radioactive materials to a patient without first assaying the dose in the dose calibrator to confirm its contents; and (4) failure to wipe test packages of technetium-99m. The report of the inspection was forwarded to you on April 25, 1988. On May 5, 1988, we held an enforcement conference with Dr. S. Spaulding, M.D. and other members of your staff to discuss the violations, their causes, and your corrective actions.

The exposure in excess of the regulatory limit occurred after 10 millicuries of phosphorus-32 was transferred from the University (an agreement state licensee) by the University investigator without the health Physicist for the Joint Radioisotope Committee first being notified. Subsequently, the University investigator, as well as one of your own investigators, engaged in an experiment at the Medical Center utilizing the phosphorus-32. However, adequate controls were not exercised during the experiment in that the appropriate equipment and procedures were not used while opening the container of phosphorus-32. As a result, the University investigator became contaminated with the phosphorus-32 which resulted in the exposure in excess of the regulatory limit.

The NRC recognizes, based on this inspection, that management of your facility has routinely exercised good control and supervision of licensed activities. Further, the NRC acknowledges the unusually prompt and extensive corrective

actions taken by the Medical Center and the University subsequent to your identification of this event, including the disciplinary action against both individuals. Nonetheless, this event demonstrates the need for resensitizing your staff to the importance of adherence to your procedures and NRC requirements to ensure safe performance of licensed activities.

The violation involving the exposure is described in Section I of the enclosed Notice of Violation and is classified at Severity Level III in accordance with the "General Statement of Policy and Procedures for Enforcement Action" (Enforcement Policy), 10 CFR 2, Appendix C (1988). Although a civil penalty is considered for a Severity Level III violation, I have decided, after consultation with the Director of Enforcement, and the Deputy Executive Director for Regional Operations, not to propose a civil penalty in this case in view of the prompt identification and reporting of this event, as well as your unusually prompt and extensive corrective actions. Nonetheless, we emphasize that any similar violations in the future may result in additional enforcement action.

The violations set forth in Section II of the enclosed Notice are classified at Severity Level IV.

In addition to the violations set forth in the Notice, we have decided not to cite the apparent violation identified in the Inspection Report concerning wipe testing packages of radioactive materials upon receipt. This decision is based on the lack of clarity in the requirement as to the definition of what constituted a package at your institution. However, after discussion of this item at the Enforcement Conference, it is our understanding that you will now wipe test the outside surfaces of the vial shields containing radioactive materials received or transferred to your nuclear medicine department from the nuclear pharmacy at the State University of New York at Buffalo, School of Medicine, Affiliated and Associated Hospitals. Please confirm our understanding in reply to this letter.

You are required to respond to this letter and the enclosed Notice, and you should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

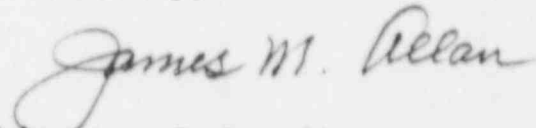
In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

Veterans Administration Medical
Center

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The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL No. 96-511.

Sincerely,


for William T. Russell
Regional Administrator

Enclosure: Notice of Violation

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New York

Dr. James W. Fletcher
Director, Nuclear Medicine Services (115)
Veteran's Administration
810 Vermont Avenue, N.W.
Washington, D.C. 20420

NOTICE OF VIOLATION

Veterans Administration Medical Center
Buffalo, New York 14215

Docket No. 30-02618
License No. 31-00786-02
EA 88-115

During an NRC inspection conducted on April 5-7, 1988, at the licensee's facility in Buffalo, New York, to review the circumstances associated with a violation identified by the licensee and reported to the NRC. During the inspection, other 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 (1988), the violations are set forth below:

I. VIOLATION ASSOCIATED WITH AN EXPOSURE INCIDENT

10 CFR 20.101(a) requires that no licensee possess, use, or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter, a total exposure to the hands and forearms of 18.75 rems, or to the skin of 7.5 rems.

Contrary to the above, during the first calendar quarter of 1988, a research investigator working in the the research hot lab, a restricted area, received a radiation exposure to the left hand of 61.32 rems, and a radiation exposure to a small area of the skin on the back of the neck of 13.48 rems.

This is a Severity Level III violation (Supplement IV)

II. VIOLATIONS OF OTHER NRC REQUIREMENTS

Condition 25 of License No. 31-00786-02 requires that licensed material be possessed and used in accordance with statements, representations and procedures contained in the application dated January 25, 1984, Radiation Protection Manual, Volume II, dated August 1977, Radiation Protection Manual, Volume I, dated July 1983 and letters dated July 14, 1986, August 22, 1986, and December 10, 1986.

1. Section XII, Volume I, of the Radiation Protection Manual describes "Radiation Contamination Monitoring" and requires that laboratory areas, where quantities of radioactive materials greater than 200 microcuries are used, be surveyed at weekly intervals.

Contrary to the above, from November 1987 to April 1988, an investigator used greater than 200 microcuries of tritium in a researcher's laboratory, and this area was surveyed on monthly, rather than weekly, intervals.

2. Section III, Volume I, of the Radiation Protection Manual describes "Radioisotope Procurement and Safety" and requires investigators to follow the written authorization from the Joint Radioisotope Committee (JRC) on the location of possession and use, the specific radionuclide, chemical and physical form, and maximum possession limit. These procedures also require that any transfer or use of material at a different location be approved by the JRC.

Contrary to the above, on January 14, 1988, an investigator involved in a collaborative project:

- a. transferred 10 millicuries of phosphorus-32 from the affiliated State University of New York at Buffalo (SUNY) to the research hot lab at the VA Medical Center without specific approval from the JRC; and
 - b. exceeded the 5 millicurie maximum possession limit authorized by the JRC for the investigator involved in the collaborative project.
3. Item 4.a of the "Special Nuclear Medicine Personnel Protection" procedures in Volume I of the Radiation Safety Manual requires that each patient dose be assayed in the dose calibrator prior to administration.

Contrary to the above, on February 29, 1988, an iodine-131 therapy dose was administered to a patient without a prior assay in the dose calibrator.

These are Severity Level IV violations (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Veterans Administration Medical Center is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region I, 475 Allendale Road, King of Prussia, Pennsylvania 19406 within 30 days of the date of the letter transmitting this 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 if admitted, (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. 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 taken. Consideration may be given to extending the response time for good cause shown.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Allan
jr William T. Russell
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 26th day of May 1988

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| NRC FORM 337 (2-84) NRCM 1102 3201, 3202 | U.S. NUCLEAR REGULATORY COMMISSION | 1. REPORT NUMBER (As required by TFOC add Vol. No., if any) |
| BIBLIOGRAPHIC DATA SHEET | | NUREG-0940 Vol 7, No. 2 |
| SEE INSTRUCTIONS ON THE REVERSE | | 3. LEAVE BLANK |
| 2. TITLE AND SUBTITLE Enforcement Actions: Significant Actions Resolved Quarterly Progress Report (April - June 1988) | | 4. DATE REPORT COMPLETED MONTH: August YEAR: 1988 |
| 5. AUTHOR(S) Office of Enforcement | | 6. DATE REPORT ISSUED MONTH: August YEAR: 1988 |
| 7. PERFORMING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code) Office of Enforcement U.S. Nuclear Regulatory Commission Washington, DC 20555 | | 8. PROJECT/TASK/WORK UNIT NUMBER |
| 10. SPONSORING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code) Same as 7 above | | 9. FUND OR GRANT NUMBER |
| 12. SUPPLEMENTARY NOTES | | 11a. TYPE OF REPORT Technical b. PERIOD COVERED (Indicate Dates) |
| 13. ABSTRACT (200 words or less) <p>This compilation summarizes significant enforcement actions that have been resolved during one quarterly period (April - June 1988) and includes copies of letters, Notices, and Orders sent by the Nuclear Regulatory Commission to licensees with respect to these enforcement actions. It is anticipated that the information in this publication will be widely disseminated to managers and employees engaged in activities licensed by the NRC, so that actions can be taken to improve safety by avoiding future violations similar to those described in this publication.</p> | | |
| 14. DOCUMENT ANALYSIS - KEYWORDS/DESCRIPTORS Technical Specifications, Radiographers, Quality Assurance, Radiation Protection Program, Safety Evaluations | | 15. AVAILABILITY STATEMENT Unlimited |
| 6. IDENTIFIERS/OPEN ENDED TERMS | | 16. SECURITY CLASSIFICATION (This page) Unclassified (This report) Unclassified 17. NUMBER OF PAGES 18. PRICE |

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NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

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