
Enforcement Actions: Significant Actions Resolved

Quarterly Progress Report
January - March 1984

**U.S. Nuclear Regulatory
Commission**

Office of Inspection and Enforcement

IE Enforcement Staff



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U.S. Nuclear Regulatory Commission
Washington, D.C. 20555



ABSTRACT

This compilation summarizes significant enforcement actions that have been resolved during one quarterly period (January - March 1984) and includes copies of letters, Notices, and Orders sent by the Nuclear Regulatory Commission to licensees with respect to these enforcement actions and the licensees' responses. It is anticipated that the information in this publication will be widely disseminated to managers and employees engaged in activities licensed by the NRC, in the interest of promoting public health and safety as well as common defense and security.

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ENFORCEMENT ACTIONS: SIGNIFICANT ACTIONS RESOLVED
January - March 1984

INTRODUCTION

This issue of NUREG-0940 is being published to inform NRC licensees about significant enforcement actions and their resolution for the first quarter of 1984. Primarily emphasized are those actions involving civil penalties and Orders that have been issued by the Director of the Office of Inspection and Enforcement and the Regional Administrators.

An objective of the NRC Enforcement Program is to encourage improvement of licensee 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 common defense and security.

A brief summary of each significant enforcement action that has been resolved in the first quarter of 1984 can be found in the section of this report entitled, "Summaries." Each summary provides the enforcement action number (EA) 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 Enforcement Actions," published in the Federal Register (47 FR 9987, March 9, 1982) and recently revised (49 FR 8583, March 8, 1984). Five levels of severity for each violation 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 is comprised of copies of completed civil penalty or order actions involving reactor licensees, arranged alphabetically. Part I.B includes copies of Notices of Violations that have been issued to reactor licensees for Severity Level III violations but for which no civil penalty was assessed. Part II.A contains civil penalty or order actions involving materials licensees and Part II.B includes copies of Notices of Violations that have been issued to materials licensees for Severity Level III violations but for which no civil penalty was assessed. The licensees' responses are also included in Parts I.A and II.A.

Actions still pending on March 31, 1984 will be included in future issues of this publication when they have been resolved.

SUMMARIES

I. REACTOR LICENSEES

A. Civil Penalties and Orders

Carolina Power and Light Company, Raleigh, North Carolina
(Brunswick Steam Electric Plant, Units 1 and 2) EA 83-88,
Supplements I and VII

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$40,000 was issued on January 10, 1984, based on violations of fire protection requirements. The Notice of Violation also included a citation for a material false statement but no civil penalty was proposed for that violation. The licensee responded and paid the civil penalty on February 9, 1984.

Commonwealth Edison Company, Chicago, Illinois
(Dresden Nuclear Power Station, Unit 2) EA 83-103, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued on November 18, 1983, based on the licensee's failure to classify the torus-to-drywell vacuum breakers actuation arm shaft seals as coming under the requirements of 10 CFR 50, Appendix B. Consequently, replacement seals were installed that did not meet 10 CFR 50, Appendix B requirements; this resulted in seal leakage of a magnitude that failed an integrated leak rate test performed on the primary containment. The penalty was escalated 25% for lack of prompt and complete corrective action in response to this event. The licensee responded on January 20, 1984, and, after consideration of the licensee's response, the staff concluded that the violations did occur. An Order was issued on March 23, 1984 and the licensee paid the civil penalty on March 26, 1984.

Commonwealth Edison Company, Chicago, Illinois
(LaSalle County Nuclear Station, Unit 1) EA 83-134, Supplement III

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$10,000 was issued December 21, 1983, based on the failure to adequately control access into vital areas. The civil penalty was reduced by 50% as a result of the licensee's prompt and extensive corrective action and an additional 25% because the licensee identified and promptly reported the violation. The licensee responded and paid the civil penalty on January 18, 1984.

Georgia Power Company, Atlanta, Georgia
(Edwin I. Hatch Nuclear Plant, Unit 2) EA 83-86, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 was issued on December 27, 1983, based on improper

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reactor shutdown in violation of the Technical Specifications and station procedures, which resulted in an unanalyzed control rod configuration. The violations were classified as a Severity Level II problem and the penalty was escalated because of the seriousness of the event, the number of Technical Specifications that were violated, and the number of licensed operators and supervisors involved. The licensee responded and paid the civil penalty on January 25, 1984.

Mississippi Power and Light Company, Jackson, Mississippi
(Grand Gulf Nuclear Station, Unit 1) EA 83-133, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$12,000 was issued on December 21, 1983, based on the failure to control temporary alterations to equipment and failure to follow approved procedures. The violations were categorized at Severity Level IV; however, because they were recurrent violations and were the subject of previous enforcement conferences for which corrective action was not effective, a civil penalty was proposed. The licensee responded and paid the civil penalty on January 26, 1984.

Portland General Electric Company, Portland, Oregon
(Trojan Nuclear Plant) EA 83-126, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 was issued on September 29, 1983, based on the licensee's inadequate reassessment of fire protection features following the issuance of 10 CFR 50, Appendix R. The licensee responded on October 28, 1983, and, after careful consideration of the licensee's response, the staff concluded that the violations did occur but the penalty was reduced by 50% based on the licensee's prompt and extensive corrective action. An Order for \$50,000 was issued on December 19, 1983. The licensee paid the civil penalty on January 19, 1984.

Southern California Edison Company, Rosemead, California
(San Onofre Nuclear Generating Station, Unit 3) EA 83-126, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$40,000 was issued on December 8, 1983, based on the licensee's failure to meet a technical specification limiting condition for operation by isolating both charging pumps. The licensee responded and paid the civil penalty on January 6, 1984.

B. Severity Level III Violations, No Civil Penalty

Duquesne Light Company, Shippingport, Pennsylvania
(Beaver Valley Power Station, Unit 1) EA 83-131, Supplement I

A Notice of Violation was issued on January 6, 1984, based on violations of NRC requirements. The first violation involved an unplanned increase of average reactor coolant temperature to 180° F,

which occurred in the refueling mode because the residual heat removal system was inoperable. The second violation involved several examples of failure to follow procedures that resulted in one of two redundant reactor plant river water subsystems being inoperable. These violations were categorized as a Severity Level III, but a civil penalty was not proposed because of the comprehensive corrective actions taken by the licensee.

Maine Yankee Atomic Power Company, Augusta, Maine
(Maine Yankee Atomic Power Station, Unit 1) EA 84-3, Supplement I

A Notice of Violation was issued on February 27, 1984, based on violations involving a breach of containment integrity. The violation was categorized as a Severity Level III. A civil penalty was not proposed because the violation was promptly reported to the NRC when identified and appropriate corrective actions were taken.

Northern States Power Company, Minneapolis, Minnesota
(Prairie Island Nuclear Generating Plant, Unit 1) EA 83-143, Supplement I

A Notice of Violation was issued on March 30, 1984, based on a technical specification limiting condition for operation being exceeded where the appropriate action statement was not satisfied; this resulted in a degraded condition. The violation was categorized as a Severity Level III. A review of the history in this general area of concern did not reveal similar problems and the licensee's overall performance as evidenced by the Systematic Assessments of Licensee Performance was good. For these reasons no civil penalty was proposed.

Public Service Company of Indiana, New Washington, Indiana
(Marble Hill Nuclear Generating Station, Units 1 and 2) EA 84-1,
Supplement VII

A Notice of Violation was issued on March 14, 1984, based on discrimination of a Quality Control Inspector assigned to the electrical contractor at the Marble Hill Nuclear Generating Station. This violation was categorized as a Severity Level III, but no civil penalty was assessed because of the decision to discontinue construction of the Marble Hill Nuclear Generating Station.

Vermont Yankee Nuclear Power Corporation, Brattleboro, Vermont
(Vermont Yankee Nuclear Power Station) EA 83-141, Supplement V

A Notice of Violation was issued on February 1, 1984, based on a violation identified when a radiation survey of a package shipped from Vermont Yankee to Beatty, Nevada, indicated dose rates in excess of regulatory limits. This violation was classified at Severity Level III, however, because the State of Nevada temporarily suspended the licensee's burial permit, no civil penalty was proposed.

II. MATERIALS LICENSEES

A. Civil Penalties and Orders

Lehigh Testing Laboratories, Inc., West Boylston, Massachusetts
EA 83-121, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$6,400 was issued December 19, 1983, based on an inspection in which numerous violations of NRC requirements were identified. These violations involved (1) failure to provide adequate training, (2) failure to adequately control licensed material, (3) failure to control personnel exposure, and (4) failure to maintain required records. The licensee responded and paid the civil penalty on January 12, 1984.

Perforating Services, Inc., Casper, Wyoming
EA 83-110, Supplements IV and VI

An Order to Show Cause and Order Temporarily Suspending License (Effective Immediately) was issued October 13, 1984, based on an inspection that revealed that the licensee had not (1) obtained personnel monitoring devices, (2) obtained a survey meter, (3) conducted surveys, (4) leak tested sealed sources, (5) set up a radioactive materials storage area as described in the license application, or (6) conducted audits to assure compliance with NRC requirements. The licensee responded on November 15, 1983, and January 10, 1984. After careful consideration of the licensee's responses and commitments, an Order Rescinding Suspension and Order Modifying License was issued on February 28, 1984.

Pittsburgh Testing Laboratory, Pittsburgh, Pennsylvania
EA 84-6, Supplement VI

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$8,000 was issued on March 2, 1984, based on two radiography rooms not being equipped with audible and visible alarms as required by 10 CFR 34.29. In one of these radiography rooms an employee received an exposure of 3,400 rads to his thumb from an x-ray radiography device which is regulated by the Commonwealth of Pennsylvania. The licensee responded and paid the civil penalty on March 20, 1984.

Professional Service Industries, Oak Brook, Illinois
EA 83-102, Supplements IV, V, and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$2,000 was issued on October 20, 1983, based on multiple examples of failure to comply with NRC requirements, including the use of a nuclear moisture density gauge by an individual who was not trained or authorized to use the gauge. The licensee responded on November 18, 1983, and, after consideration of the response, an Order was issued on December 19, 1983. The licensee paid the civil penalties on January 3, 1984.

Roof Auditing Services, Oreland, Pennsylvania
EA 83-112, Supplements IV & VI

An Order to Show Cause and Order Temporarily Suspending License (Effective Immediately) was issued on October 13, 1983, based on an inspection that revealed unauthorized individuals using the moisture gauges containing radioactive material, film badges not being used, and the gauges being stored in unauthorized locations. After consideration of the licensee's responses dated November 15 and December 8, 1983, a Decision on Order to Show Cause was issued on December 27, 1983, rescinding the suspension of license. This decision was based on the determination that the licensee had made and committed to improvements in its program to comply with license requirements.

Terre Haute Regional Hospital, Terre Haute, Indiana
EA 83-95, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$2,500 was issued on October 19, 1983, based on multiple violations including the use of byproduct materials by unauthorized individuals, the failure (1) to leak test sealed sources at required intervals, (2) to provide personnel monitoring devices, (3) to calibrate survey meters at required intervals, and (4) to post certain documents or notices. The licensee responded on November 7, 1983, and, after consideration of the licensee's response, an Order was issued January 17, 1984. The licensee paid the civil penalties on January 27, 1984.

Union Carbide Corporation, Grand Junction, Colorado
EA 83-108, Supplements IV & VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$4,000 was issued on November 3, 1983, based on multiple violations including the failure (1) to check audible alarm function, (2) to recalibrate radiation sampling and detection equipment after repair, (3) to establish written procedures as required, (4) to perform monthly surveys of administrative offices, (5) to submit a license amendment for utilizing a lined evaporation pad, (6) to perform routine examinations of slurry transport lines, (7) to sample yellowcake effluent stack at prescribed frequency, and (8) to conduct semiannual fire drills. Collectively these violations represented a breakdown in management oversight and control of the radiation safety program and demonstrated the need for improvement in the administrative and control of the program to assure adherence to NRC requirements and safe performance of licensed activities. The licensee responded on December 9, 1983, and, after consideration of the licensee's response, an Order was issued on February 10, 1984. The licensee paid the civil penalties on February 28, 1984.

United States Testing Company, Inc., Hoboken, New Jersey
EA 83-81, Supplement IV

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$8,000 was issued on October 7, 1983, based on a Severity Level I overexposure event that occurred during licensed radiographic activities conducted by the licensee. The licensee responded on October 27, 1983 and, after consideration of the licensee's response, an Order was issued on January 10, 1984. The licensee paid the civil penalties on January 20, 1984.

B. Severity Level III Violations, No Civil Penalty

C. William Simcoe, M.D., Tulsa, Oklahoma
EA 84-4, Supplement VI

A Notice of Violation was issued on February 9, 1984, based on violations of NRC requirements that involved an unauthorized user of radioactive material. No civil penalty was proposed because the unauthorized user was a physician technically qualified to use the material and the licensee took prompt corrective action after being informed of the violation.

I.A. REACTOR LICENSEES, CIVIL PENALTIES AND ORDERS



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

JAN 10 1984

Carolina Power and Light Company
ATTN: Mr. E. E. Utley
Executive Vice President
411 Fayetteville Street
Raleigh, NC 27602

Gentlemen:

SUBJECT: PROPOSED IMPOSITION OF CIVIL PENALTY: EA 83-88
VIOLATIONS OF FIRE PROTECTION REQUIREMENTS
(REFERENCE: REPORT NOS. 50-325/83-11 AND 50-324/83-11)

A special inspection was conducted by this office during the period March 18 - April 15, 1983 of activities authorized by NRC License Nos. DPR-71 and DPR-62 for the Brunswick facility. The inspection included a detailed review of the circumstances surrounding two areas of concern involving failure to comply with NRC regulatory requirements. The first area involved violation of fire protection Limiting Conditions for Operation (LCO's). This issue was discussed with CP&L management on March 25 and April 15, 1983 by the Senior Resident Inspector and was also the subject of an investigation performed by the NRC Office of Investigations. The second area of concern involved a submittal to this office by CP&L in response to a Notice of Violation containing an inaccurate statement having safety implications. This second area of concern was discussed during an Enforcement Conference held at the Brunswick facility on April 26, 1983 by Mr. R. D. Martin, Deputy Regional Administrator.

The first issue involves a determination by CP&L on March 13, 1982 that, while both trains of the Unit 1 Standby Gas Treatment System deluge system were inoperable between February 11 and March 13, 1983, a continuous fire watch was not posted as required by Technical Specifications. The two deluge system trains were made inoperable by the closure of the common supply valve to facilitate planned maintenance on the Unit 1 Service Water System. Failure to post the required firewatch is indicative of a weakness in implementation of the Brunswick fire protective program. The significance of this event is increased by the fact that the surveillance performed by fire protection aides was incorrectly documented in that the isolation valve was recorded as locked open on February 12, 20, 26 and March 7, 1983 although it was actually shut. This violation resulted from a programmatic breakdown of fire protection

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Carolina Power and Light Company

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administrative and managerial controls. This violation also indicates systematic weaknesses in the training of nonlicensed personnel in the conduct of safety-related activities. The other items cited in the Notice of Violation are also indicative of programmatic weakness in your fire protection program.

The fire protection LCO violation has been classified in the enclosed Notice of Violation as a Severity Level III violation, in accordance with the NRC Enforcement Policy, Supplement I, 10 CFR Part 2, Appendix C. To emphasize the need for you to operate the Brunswick facility in accordance with facility Technical Specifications, and after consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$40,000 for this violation.

With regard to the second issue, during a January 1982 routine inspection, the NRC Resident Inspector at your Brunswick facility identified discrepancies in the Q-listing of safety-related pressure switches. The Q-list is contained in Tables I and IA of the Plant Operating Manual. The discrepancies involving the safety-related pressure switches were documented in Inspection Report No. 50-324/82-10 and 50-325/82-10. The discrepancies were categorized at that time as Severity Level V violations, violations which are of minor safety significance. A Notice of Violation was issued by the NRC dated April 2, 1982. The CP&L response, dated May 24, 1982, to the Notice of Violation stated that the discrepancies had been corrected. An inspection conducted during the period November 15 - December 15, 1982 by the Resident Inspector revealed that Q-list discrepancies continued to exist. This item was addressed in a Notice of Violation issued on February 7, 1983 with Inspection Report No. 50-324/82-45 and 50-325/82-45. Subsequent evaluation by the NRC staff determined that the CP&L response of May 24, 1982 contained a material false statement. This material false statement appears to have resulted from your failure to have an appropriate system in effect to ensure the accuracy of statements submitted to the NRC.

The material false statement has been classified in the enclosed Notice of Violation as a Severity Level III violation in accordance with the NRC Enforcement Policy, Supplement VII, 10 CFR Part 2, Appendix C, Miscellaneous Matters. However, in recognition of the fact that the statements were made over a year ago and substantive improvements have been made in your program to ensure that statements made to the NRC are accurate and complete, the Commission has decided not to propose a civil penalty for this violation.

You are required to respond to the Notice and should follow the instructions specified therein when preparing your response. In response to the enclosed Notice of Violation, please include the changes you have made, or plan to make, in the Brunswick Improvement Program which address programmatic problems in the fire protection program. In your response you may make reference to previous correspondence or other submittals to the NRC.

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 enclosure will be placed in the NRC's Public Document Room.

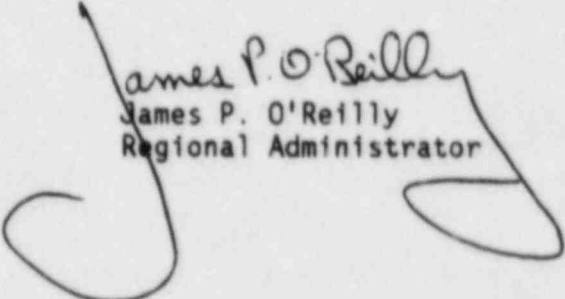
JAN 10 1964

Carolina Power and Light Company

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The responses directed by this letter and the enclosures 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 P. O'Reilly
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
P. W. Howe, Vice President
C. R. Dietz, Plant Manager

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Carolina Power and Light Company
Brunswick, Units 1 and 2

Docket Nos. 50-325
50-324
License Nos. DPR-62
DPR-71
EA 83-88

During an inspection conducted March 18-25, 1983, violations of NRC requirements were identified. These violations resulted from decisions made on February 11, 1983 to shut the water supply valve (WW-V207) during maintenance. Shutting this valve isolated the water supply to the Standby Gas Treatment deluge system resulting in the violation of Brunswick Technical Specifications. The position of valve WW-V207 was required to be verified during several subsequent surveillance tests. Although the valve was required to be verified as being in the locked open position, the actual position of the valve (shut) was not discovered until March 13, 1983. During the period February 11 - March 13, 1983, the required fire watch was not established. When the valve was discovered in the shut position on March 13, 1983, this event was not promptly reported to the NRC in accordance with Technical Specifications.

To emphasize the need to operate the Brunswick facility in accordance with facility Technical Specifications, the NRC is proposing a civil penalty in the amount of \$40,000.

Further, in an inspection conducted January 19-21, 1982 (Inspection Report 50-324/82-10 dated April 2, 1982), inadequacies in the implementation of surveillance testing of safety-related instruments at the Brunswick facility were identified. Specifically, certain pressure switches were not tested at the required frequency. These inadequacies were classified as a Severity Level V violation in the Notice of Violation issued April 2, 1982. CP&L's response, dated May 24, 1982, to the Notice of Violation admitted the violation and stated that the cause of the violation was a discrepancy between Tables I and IA in Volume XI of the Plant Operating Manual (POM). Both Tables identify surveillance requirements for safety-related equipment (i.e., Q-list equipment). The response stated that, since Table IA did not describe pressure switches as Q-list equipment, they were not entered on the Periodic Maintenance Scheduling Program. Therefore, these instruments were not tested in accordance with the required surveillance frequency. The May 24, 1983 response further stated:

"The tables (I and IA) in Volume XI have been revised to assure that all Q-list equipment is correctly identified on both tables. In addition, instructions for retrieving a correct maintenance instruction for a particular instrument have been provided at each maintenance computer console. All Q-listed instrumentation has been entered into the Periodic Maintenance Scheduling Program to assure a proper calibration schedule. This item is considered closed."

During an inspection conducted November 15 - December 15, 1982 (IE Inspection Report No. 50-324/82-45 dated February 7, 1983), the NRC Resident Inspector again identified discrepancies between Tables I and IA. The failure to implement corrective action was classified as a Severity Level IV violation of the requirements of 10 CFR Part 50, Appendix B, Criterion XVI, and the QA Program described in Chapter 13 of the Brunswick FSAR. These discrepancies revealed that the licensee had failed to properly implement the corrective action discussed in the May 24, 1982 response to Inspection Report No. 50-324/82-10. The statement quoted above which was contained in the licensee's response of May 24, 1982 is considered to be false and material. The statement was false in that Tables I and IA did not correctly identify all Q-list equipment. The statement is material for the NRC would have taken further regulatory action to correct the Tables had it known they were incorrect.

In accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, 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, the particular violations and associated civil penalty are set forth below:

Violation Assessed a Civil Penalty

Technical Specification 3.7.7.2 for Brunswick, Unit 1, requires that the deluge system for the Standby Gas Treatment System (SBGTS) trains 1A and 1B, be operable whenever the SBGTS system is required to be operable. Action Statement "a" of TS 3.7.7.2 requires that, with the deluge system inoperable, a continuous fire watch with backup suppression equipment be established within one hour.

Contrary to the above, the Unit 1 deluge system for the SBGTS trains 1A and 1B was rendered inoperable when valve 1-WW-V207 was shut during the period of February 11 to March 13, 1983 and a continuous fire watch was not established. During this time the plant was in a condition which required the SBGTS to be operable.

Severity Level III violation (Supplement I)
Civil Penalty \$40,000

Violations Not Assessed a Civil Penalty

- A. In a response dated May 24, 1982 describing corrective action taken with respect to a Notice of Violation dated April 2, 1982, the licensee stated that Tables I and IA of Volume XI of the licensee's Plant Operating Manual had been revised to assure that all Q-list equipment was correctly identified on both Tables. These Tables are used by licensee personnel as a reference to determine if a plant instrument is a Q-item (i.e., safety-related).

Contrary to the above, on May 24, 1982 and as of November 1982, numerous discrepancies existed between Tables I and IA of Volume XI of the licensee's Plant Operating Manual and consequently the Tables did not correctly identify

all Q-list equipment. For example, Table IA did not identify pressure switches as Q-list equipment while Table I did. Thus, the licensee's response to the NRC of May 24, 1982 contained a material false statement within the meaning of Section 186 of the Atomic Energy Act of 1954, as amended. The licensee's statement was false in that Tables I and IA did not correctly identify all Q-list equipment. The statement is material for the NRC would have taken further regulatory action to correct the Tables had it known they were incorrect.

Severity Level III violation (Supplement VII)

- B. Technical Specification 3.7.8 for Brunswick, Units 1 and 2 requires that all fire barrier penetrations, fire doors and fire dampers, in fire zone boundaries protecting safety-related areas, shall be functional. Technical Specification 3.7.8 Action Statement "a" requires that, with one or more of the fire barrier penetrations non-functional, within one hour a continuous fire watch must be established on at least one side of the affected penetration or verify the operability of fire detectors on at least one side of the non-functional fire barrier and establish an hourly fire watch patrol.

Contrary to the above, during the period of February 13, to April 5, 1983, fire barrier penetrations protecting safety-related areas in Units 1 and 2 were non-functional and the associated fire detectors were inoperable without continuous fire watch.

Severity Level IV violation (Supplement I)

- C. Technical Specification 6.8.1.f for Units 1 and 2 requires that written procedures shall be established, implemented and maintained covering Fire Protection Program implementation.

Contrary to the above, procedures covering the Fire Protection Program for Units 1 and 2 were not adequately implemented as demonstrated by the following examples:

- a. Fire protection surveillance procedure PT-35.7 was inadequately implemented on February 12, 20, and 26 and March 7, 1983 in that the position of valve WW-V207 was not properly identified. The valve was shut. The position was recorded as being locked open.
- b. Fire protection surveillance procedure PT-35.1 was inadequately implemented on February 14, 21, and 28 and March 7, 1983 in that valve WW-V207 was not properly verified as locked open.
- c. Fire protection procedures PT-35.16 and PT-35.18 were not being adequately implemented in that surveillance to ensure the functional status of fire barrier penetrations were not being performed in accordance with the acceptance criteria specified in these tests.

Severity Level IV violation (Supplement I)

- D. Technical Specification 6.9.1.8.6 for Unit 1 requires the reporting within 24 hours by telephone and confirmation by telegraph, mailgram, or facsimile transmission to the Director of the Regional Office or his designee no later than the first working day following operation of the unit or affected system when any parameter or operation subject to an LCO is less conservative than the least conservative aspect of the LCO established in the Technical Specification.

Contrary to the above, the LCO violation described in Item B above was a reportable event which was not reported to the NRC Region II within 24 hours.

Severity Level IV violation (Supplement I).

- E. Technical Specification 6.9.2 for Unit 1 requires a special report to be issued within 30 days after a fire barrier penetration has been inoperable for 7 days.

Contrary to the above, in four instances, once on January 26, twice on February 19, and once on March 12, 1983, fire barrier penetrations were inoperable for more than 7 days and the required special reports were not submitted.

Severity Level IV Violation (Supplement I)

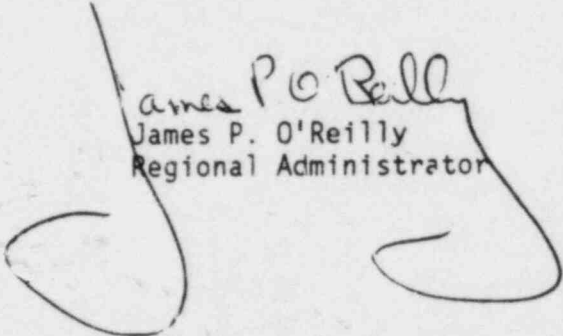
Pursuant to the provisions of 10 CFR 2.201, Carolina Power and Light Company is hereby required to submit to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II, within 30 days of the date of this Notice a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons 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. 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, Carolina Power and Light Company may pay the civil penalty in the amount of \$40,000 or may protest imposition of the civil penalty in whole or in part by a written answer. Should Carolina Power and Light Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement will issue an Order imposing the civil penalty proposed above. Should Carolina Power and Light Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer may: (1) deny the violation presented 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

contained in Section IV(B) of 10 CFR Part 2, Appendix C 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 statements or explanation by specific reference (e.g., giving page and paragraph numbers) to avoid repetition. Carolina Power and Light Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedures for imposing a civil penalty.

Upon failure to pay any civil 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. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION


James P. O'Reilly
Regional Administrator

Dated in Atlanta, Georgia
this ^{9th} day of January 1984

FEB 09 1984

Mr. Richard C. DeYoung, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62
RESPONSE TO NOTICE OF VIOLATION

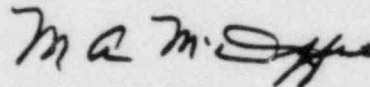
Dear Mr. DeYoung:

Carolina Power & Light Company (CP&L) has received the letter from Mr. James P. O'Reilly dated January 10, 1984 transmitting a Notice of Violation and Proposed Imposition of Civil Penalty (EA 83-88). Carolina Power & Light Company has also received Inspection Reports 50-324/83-11 and 50-325/83-11 for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2. The above referenced Inspection Reports do not contain any information of a proprietary nature.

Pursuant to 10 CFR 2.205, CP&L hereby encloses its check in the amount of forty-thousand dollars (\$40,000) payable to the Treasurer of the United States, in payment of the proposed civil penalty. As required by 10 CFR 2.201, CP&L's response to the Notice of Violation issued with the Proposed Imposition of Civil Penalty is enclosed.

Should you need any additional information, please contact our Licensing Staff.

Yours very truly,



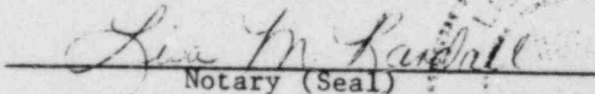
M. A. McDuffie
Senior Vice President
Nuclear Generation

WRM/ccc (9453WRM)
Enclosures

cc: Mr. M. Grotenhuis (NRC)
Mr. J. P. O'Reilly (NRC-RII)
Mr. D. B. Vassallo (NRC)

M. A. McDuffie, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.

My commission expires: 5/12/88


Notary (Seal)

ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
INSPECTION REPORTS 50-324/83-11 AND 50-325/83-11
RESPONSE TO NOTICE OF VIOLATION

Inspection Reports 50-324/83-11 and 50-325/83-11 and the January 10, 1984 Notice of Violation (EA 83-88) identified six items that were in non-compliance with NRC requirements. These items and Carolina Power & Light Company's response to each are addressed in the following text:

VIOLATION A (SEVERITY LEVEL III):

In a response dated May 24, 1982, describing corrective action taken with respect to a Notice of Violation dated April 2, 1982, the licensee stated that Tables I and IA of Volume XI of the licensee's Plant Operating Manual had been revised to assure that all Q-list equipment was correctly identified on both tables. These tables are used by licensee personnel as a reference to determine if a plant instrument is a Q-item (i.e., safety-related).

Contrary to the above, on May 24, 1982, and as of November 1982, numerous discrepancies existed between Tables I and IA of Volume XI of the licensee's Plant Operating Manual, and consequently the tables did not correctly identify all Q-list equipment. For example, Table IA did not identify pressure switches as Q-list equipment while Table I did. Thus, the licensee's response to the NRC of May 24, 1982, contained a material false statement within the meaning of Section 186 of the Atomic Energy Act of 1954, as amended. The licensee's statement was false in that Tables I and IA did not correctly identify all Q-list equipment. The statement is material for the NRC would have taken further regulatory action to correct the tables had it known they were incorrect.

CAROLINA POWER & LIGHT COMPANY'S RESPONSE:

1. Admission or Denial of Violation

Carolina Power & Light Company acknowledges that the identification of corrective actions set forth in CP&L's response to IE Inspection Report 50-324(325)/82-10, Violation D, was not accurate, due to an unintentional error, in that Tables I and IA of the Plant Operating Manual, Volume XI (Q-list), were not consistent.

2. Reason for Violation

This event occurred due to the lack of clear definition of the scope of the Q-list upgrade project and to inadequate direction to all site subunits responsible for input.

3. Corrective Steps Taken and Results Achieved

- a. The Q-list has been thoroughly reviewed for inconsistencies and corrected where applicable.

- b. The Q-list has been reformatted to minimize the potential for inconsistencies.
 - c. The Q-list has been made unit specific to prevent errors due to the differences in equipment.
 - d. Enhanced procedural controls have been implemented to maintain the list up-to-date.
 - e. A Project Engineer has been assigned to the Q-list to oversee future improvements.
 - f. Plant procedures have been developed which provide more rigid controls for accuracy of data submitted to the NRC. These controls include statement verifications and additional management reviews prior to submittal.
4. Corrective Steps to be Taken

No additional corrective actions are planned for this event.

5. Date Full Compliance will be Achieved

Full compliance for this event has been achieved.

VIOLATION B (SEVERITY LEVEL IV):

Technical Specification 3.7.8 for Brunswick, Unit Nos. 1 and 2, requires that all fire barrier penetrations, fire doors, and dampers, in fire zone boundaries protecting safety-related areas shall be functional. Technical Specification 3.7.8 Action Statement "a" requires that, with one or more of the fire barrier penetrations non-functional, within one hour a continuous fire watch must be established on at least one side of the affected penetration or verify the operability of fire detectors on at least one side of the non-functional fire barrier and establish an hourly fire watch patrol.

Contrary to the above, during the period of February 13 to April 5, 1983, fire barrier penetrations protecting safety-related areas in Unit Nos. 1 and 2 were nonfunctional and the associated fire detectors were inoperable without continuous fire watch.

CAROLINA POWER & LIGHT COMPANY'S RESPONSE:

1. Admission or Denial of Violation

Carolina Power & Light Company acknowledges that it failed to establish continuous fire watches as noted in the violation. This violation was identified by CP&L during an internal review of the Fire Protection Program.

2. Reasons for the Violation

The Operations Shift Foreman made an erroneous determination that hourly versus continuous fire watches were to be maintained in the AOG Building when the area fire detectors were declared inoperable by considering only Technical Specification 3.3.5.7, which addresses detector operability. Hourly fire watches had previously been established in accordance with Technical Specification 3.7.8 due to inoperable fire barriers in the AOG Building. When the fire detectors became inoperable, the Shift Foreman failed to realize that Technical Specification 3.7.8 required continuous versus hourly fire watches since Technical Specification 3.3.5.7 did not provide any reference to other restrictions involving the operability of fire detectors.

3. Corrective Steps Taken and Results Achieved

- a. The use of hourly fire watches has currently been discontinued and replaced by the establishment of a continuous roving fire watch in cases where fire detector or fire barrier operability is concerned. This fire watch, when required, is maintained in the affected area.
- b. Training modules for the Fire Support group have been implemented and completed, emphasizing an increased understanding of Fire Protection systems. Additional training has been conducted on the interrelations of systems within Technical Specifications.

4. Corrective Steps to be Taken

No additional corrective action for this event is planned or anticipated. Corrective measures already implemented have resulted in satisfactory procedural controls for handling Fire Protection related LCOs to avoid future occurrences of this nature.

5. Date Full Compliance will be Achieved

Full compliance for this event has been achieved.

VIOLATION C (SEVERITY LEVEL IV):

Technical Specification 6.8.1.f for Unit Nos. 1 and 2 requires that written procedures shall be established, implemented, and maintained covering Fire Protection Program implementation.

Contrary to the above, procedures covering the Fire Protection Program for Unit Nos. 1 and 2 were not adequately implemented as demonstrated by the following examples:

- a. Fire Protection Surveillance Procedure, PT-35.7, was inadequately implemented on February 12, 20, 26, and March 7, 1983, in that the position of valve WW-V207 was not properly identified. The valve was shut. The position was recorded as being locked open.

- b. Fire Protection Surveillance Procedure, PT-35.1, was inadequately implemented on February 14, 21, 28, and March 7, 1983, in that valve WW-V207 was not properly verified as locked open.
- c. Fire Protection procedures PT-35.16 and PT-35.18 were not being adequately implemented in those surveillances to ensure the functional status of fire barrier penetrations were not being performed in accordance with the acceptance criteria specified in these tests.

CAROLINA POWER & LIGHT COMPANY'S RESPONSE:

1. Admission or Denial of Violation

Carolina Power & Light Company acknowledges that it failed to adequately implement procedures covering the Fire Protection Program as stated in the violation. Two of the three examples were identified by CP&L during its investigation of the event.

2. Reasons for the Violation

- a. PT-35.7, which contains a step to check the position of valve WW-V207, did not require a hands-on verification of the valve position. In addition, the subject valve is remotely located in a dimly lighted pipe chase below floor level which led to an inaccurate determination of its position by visual verification alone. This example was reported by CP&L.
- b. PT-35.1 includes a prerequisite to verify that the Fire Protection System is lined up per OP-41. Valve WW-V207 is contained in the OP-41 valve lineup procedure and was not in its required open position when PT-35.1 was conducted. No method existed for tracking exceptions to valve lineups, resulting in the failure to recognize that valve WW-V207 was out of position and under clearance.
- c. PT-35.16 and PT-35.18 were improperly implemented as a result of insufficient training of the Fire Protection personnel assigned to perform the PTs. The determination of fire barrier seal operability was incorrectly based on visual inspection and experience rather than on the acceptance criteria specified in the PT. This example was reported by CP&L.

3. Corrective Steps Taken and Results Achieved

- a. PT-35.7 was revised on April 2, 1983, to require a hands-on-check of the associated fire protection valves. Fire Protection personnel who perform periodic testing have also been trained in the proper method to check valve position as specified in OI-13, Valve and Electrical Lineup Verification. As an interim measure until this training was completed, Fire Protection personnel who were assigned evolutions requiring valve position verification were required to be accompanied by Auxiliary Operators.

- b. A method for tracking exceptions to valve lineups has been incorporated into OI-13, requiring the use of a valve lineup exception form as documentation for the reason that a valve is not in its specified lineup position.
- c. Fire Protection personnel have received training and were required to pass a written exam on Fire Protection related Technical Specifications. In addition, they have received training on Fire Protection training modules. Real time training is conducted on a continuing basis to maintain their degree of understanding and knowledge pertaining to current plant Fire Protection concerns. Verbatim compliance with approved procedures has also been emphasized as a direct result of this event.

4. Corrective Steps to be Taken

No additional corrective action for these events is planned or anticipated. Satisfactory controls have been established to avoid future occurrences of this nature.

5. Date Full Compliance will be Achieved

Full compliance for these events has been achieved.

VIOLATION D (SEVERITY LEVEL IV):

Technical Specification 6.9.1.8 for Unit No. 1 requires the reporting within 24 hours by telephone and confirmation by telegraph, mailgram, or facsimile transmission to the Director of the Regional Office or his designee no later than the first working day following operation of the unit or affected system when any parameter or operation subject to an LCO is less conservative than the least conservative aspect of the LCO established in the Technical Specification.

Contrary to the above, the LCO violation described in the proposed civil penalty was a reportable event which was not reported to the NRC Region II within 24 hours.

CAROLINA POWER & LIGHT COMPANY'S RESPONSE:

1. Admission or Denial of Violation

Carolina Power & Light Company acknowledges that it failed to make the required prompt report when valve WW-V207 was found shut. This event was identified by CP&L on March 18, 1983.

2. Reasons for the Violation

The Shift Foreman and Shift Operating Supervisor that were involved in identifying the need for an LCO due to the WW-V207 valve being found closed failed to recognize that the conditions of the LCO had been exceeded, thus requiring a 24 hour report to be made in accordance with Technical Specification 6.9.1.8.b. No investigative action was initiated at that time. A review of the LCO form by the Regulatory Compliance group

later in the day also failed to reveal the need for a prompt notification based on the information provided on the LCO form. Five days later the full scope of the occurrence was recognized and a prompt report was made.

3. Corrective Steps Taken and Results Achieved

- a. A prompt report was made to the NRC Region II office on March 18, 1983.
- b. Formal documented "live time" training was initiated on March 29, 1983, for appropriate operating shift personnel covering details of this event, including event description, investigation results, corrective actions, safety considerations, and reportability evaluation.

4. Corrective Steps to be Taken

No additional corrective action for this event is planned or anticipated.

5. Date Full Compliance will be Achieved

Full compliance for this event has been achieved.

VIOLATION E (SEVERITY LEVEL IV):

Technical Specification 6.9.2 for Unit No. 1 requires a special report to be issued within 30 days after a fire barrier penetration has been inoperable for seven days.

Contrary to the above, in four instances, once on January 26, twice on February 19, and once on March 12, 1983, fire barrier penetrations were inoperable for more than seven days and the required special reports were not submitted.

CAROLINA POWER & LIGHT COMPANY'S RESPONSE:

1. Admission or Denial of Violation

Carolina Power & Light Company acknowledges that it failed to make required special reports as required by Technical Specifications. This event was identified by CP&L during its review of the Fire Protection Program.

2. Reasons for the Violation

- a. At the time, there was no established system for the daily tracking of fire barrier seal LCOs. Consequently, whenever an LCO time frame was exceeded, there was no mechanism by which to notify plant Regulatory Compliance personnel that a 30 day special report was required in accordance with Technical Specification 6.9.2.

- b. Plant procedures did not provide a mechanism for notifying the Regulatory Compliance group that a protection system had exceeded the allowable technical specification time and that a special report was required.

3. Corrective Steps Taken and Results Achieved

- a. Plant Operating Instruction OI-04, which deals with the handling, tracking, and disposition of plant LCOs, was revised on April 8, 1983 to establish a positive tracking system for Fire Protection LCOs. In addition, it is now specifically outlined in the procedure which plant group is responsible for notifying Regulatory Compliance of an exceeded LCO time frame and how to accomplish the notification.
- b. Special training was given to members of the plant Fire Protection group to upgrade their knowledge of the LCO tracking and handling system with respect to Fire Protection LCOs as reflected in the recently revised OI-04.
- c. The Senior Fire Protection System Specialist now maintains a daily running account of all active fire barrier seal LCOs. This ensures that those LCOs which have exceeded their specified time frames are reported to Regulatory Compliance so that timely reporting to the Commission may be accomplished.
- d. Plant management also reviews, on each working day, the status of active plant and Fire Protection System LCOs. This will help to ensure expeditious processing, correction, and cancellation of these LCOs.

4. Corrective Steps to be Taken to Avoid Further Violations

No additional corrective actions for this event are planned or anticipated. Corrective measures already implemented have resulted in a satisfactory awareness of Operations and Fire Protection personnel to avoid future occurrences of this nature.

5. Date Full Compliance will be Achieved

Full compliance has been achieved. *

VIOLATION (SEVERITY LEVEL III; CIVIL PENALTY \$40,000):

Technical Specification 3.7.7.2 for Brunswick, Unit No. 1, requires that the Deluge System for the Standby Gas Treatment System (SBGTS) Trains 1A and 1B, be operable whenever the SBGTS System is required to be operable. Action statement "a" of Technical Specification 3.7.7.2 requires that, with the Deluge System inoperable, a continuous fire watch with backup suppression equipment be established within one hour.

Contrary to the above, the Unit No. 1 Deluge System for the SBGTS Trains 1A and 1B was rendered inoperable when valve WW-V207 was shut during the period of February 11 to March 13, 1983, and a continuous fire watch was not established. During this time, the plant was in a condition which required the SBGTS to be operable.

CAROLINA POWER & LIGHT COMPANY'S RESPONSE:

1. Admission or Denial of the Alleged Violation

Carolina Power & Light Company acknowledges that a continuous fire watch was not established when valve WW-V207 was isolated as required by Technical Specifications. This event was reported in LER 1-83-15 on April 1, 1983.

2. Reasons for the Violation

Affected Deluge Systems were unknowingly isolated by closing valve WW-V207 while attempting to isolate Service Water System vital header inleakage. Since it was not recognized that the Deluge Systems were isolated, no LCO was initiated.

The following items were identified as contributing factors:

- a. The plant Shift Operating Supervisor (SOS) did not provide appropriate independent review and oversight and was too involved in the details of the actions being taken in association with generating the clearance.
- b. The plant drawing aperture card, utilized when attempting to isolate the Service Water System vital header inleakage, was not easily interpretable.
- c. Plant equipment clearance procedures did not provide for an overall plant systems impact consideration when additional clearance tags were placed on already existing equipment clearances.

3. Corrective Steps Taken and Results Achieved

- a. An appropriate LCO and fire watch were established when the event was identified and maintained until valve WW-V207 was reopened on March 15, 1983.
- b. A complete internal operations audit of existing plant equipment clearances was conducted to ensure compliance with applicable LCOs. This audit verified no LCOs were being violated.
- c. The involved SOS was extensively counseled concerning this event and further disciplinary action was taken.
- d. Informal on-shift counseling was conducted by the Manager - Plant Operations for shift supervisory personnel concerning this event. This informal counseling was begun immediately following the determination of the event.

- e. Formal, documented "live time" training was begun on March 29, 1983, for appropriate operating shift personnel covering details of this event, including event description, investigation results, corrective actions, safety considerations, and reportability evaluations.
- f. The clearance procedure has been revised to require a complete review of the entire clearance when extending the boundary of an existing clearance.
- g. Appropriate in-line valve handwheels in the Fire Protection System have been painted red for immediate identification as a Fire Protection valve.
- h. Plant drawing aperture cards have been upgraded to allow easier interpretation of actual system layouts. This upgrade is continuing as an ongoing process.

The results of the immediate corrective actions taken corrected the violation and ensured that no similar conditions existed. Follow-up corrective actions have improved operating practices and operational administrative controls such that the possibility of reoccurrence has been greatly reduced.

4. Corrective Steps Taken to Avoid Further Violations

No additional corrective actions for this event are planned or anticipated.

5. Date Full Compliance will be Achieved

Full compliance for this event has been achieved.

ADDITIONAL INFORMATION

While Carolina Power & Light Company acknowledges that the Deluge Systems to the Unit No. 1 SBT Systems 1A and 1B were made inoperable from February 11 to March 13, 1983, we would like to present several items which we believe reduce the safety significance of this event:

- 1. Although a fire watch was not specifically assigned to monitor the unprotected area, a radiation checkpoint station located between the SBTs was continuously manned during this period.
- 2. A review of Shift Foremen's log and LCOs indicate that the standpipe system and the fire detection system in the area of the SBTs were operable from February 11, 1983 to March 13, 1983 except for approximately one hour on March 10, 1983. The standpipe system was isolated from 10:45 a.m. to 11:40 a.m. to allow work on the system.
- 3. During the time of this event, Unit No. 1 was in Operational Condition 5 (Refuel) and the only equipment in the area required to be operable were the SBTs. Having been in cold shutdown for two-to-three months prior to and during this event, the anticipated fission product heat loading would

be greatly reduced from that of the design TID-14844 release. In any case, as a fire would make the SBGTS inoperable - so would activation of the Deluge System.

BRUNSWICK IMPROVEMENT PROGRAM

The notice of the proposed imposition of Civil Penalty also requested that CP&L include the changes we made, or plan to make, in the Brunswick Improvement Program (BIP) which address the programmatic problems in the Fire Protection Program. CP&L does not plan to initiate changes to the BIP to separately address the Fire Protection Program. Since this event occurred (approximately one year ago), many changes have been effected concerning Fire Protection - as addressed in the corrective actions to the enclosed violations. In addition, a Principal Engineer - Operations position has been staffed with specific management responsibility for the Fire Protection Program. The filling of this position has been instrumental in providing the managerial guidance needed in this area. Following assumption of the Principle Engineering position, an assessment of the Fire Protection Program was performed in which several additional areas were identified which require improvement. Based on the results of this assessment, and any future assessments, appropriate programmatic upgrades will be incorporated.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

NOV 18 1983

Docket No. 50-237
License No. DPR-19
EA 83-103

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

Gentlemen:

This refers to the special safety inspection conducted at Dresden Nuclear Power Station, Unit No. 2, by Messrs. R. A. Hasse and J. N. Kish of the Region III staff during the period June 6 through September 8, 1983. The operation of Dresden Nuclear Power Station, Unit No. 2, is authorized by NRC Operating License No. DPR-19. This inspection concerned the circumstances that resulted in the failure of torus-to-drywell vacuum breaker actuation arm shaft seals during a primary containment Integrated Leak Rate Test (ILRT) performed during the 1983 refueling outage. The results of this inspection were discussed on September 16, 1983, during an Enforcement Conference held in the NRC Region III office between Mr. Cordell Reed and other members of your staff and Mr. A. B. Davis and other members of the Region III staff.

The inspection revealed that the primary factor leading to the installation of seals unable to pass the ILRT was the failure to apply controls for their procurement and installation required by Appendix B to 10 CFR Part 50. The inspection further revealed that these seals were installed during the 1981 refueling outage and remained in service during the entire 1981-1983 operating cycle. The failure of the seals during the ILRT indicates that they were unable to perform their function of maintaining containment integrity under elevated containment pressure conditions.

To emphasize the importance of properly identifying and controlling equipment subject to Appendix B requirements, we propose to impose a civil penalty for the violation set forth in the Notice of Violation enclosed with this letter. The violation in the enclosed Notice has been categorized as a Severity Level III violation as described in the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C. The base civil penalty for a Severity Level III violation is \$40,000. However, after considering the lack of prompt and complete corrective action in response to this event, especially

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

NOV 18 1983

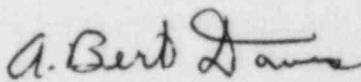
in light of the prior notice of similar events and issues in NRC Inspection Report No. 50-237/82-20 (DPRP), the base civil penalty has been increased by 25%. After consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Fifty Thousand Dollars (\$50,000).

You are required to respond to the enclosed Notice of Violation and Proposed Imposition of Civil Penalty and should follow the instructions in the Notice when preparing your response. In addition to responding to the specific violation, you should also address actions you have taken or plan to take (including schedules) regarding the unresolved items identified in Paragraph 2.d(iv) of Inspection Report No. 50-237/83-17(DE). These items include: (1) the qualification of the seals and grease used with the seals to perform under the environmental conditions expected during a design-basis event; (2) the adequacy of specifications in procurement documents to assure spare/replacement parts are at least equivalent to the original parts; and (3) the potential for circumvention of the classification review of parts not subject to 10 CFR 50, Appendix B, used in systems that are subject to the requirements of 10 CFR 50, Appendix B, by the use of generic classifications for all CECo stations.

In accordance with 10 CFR 2.790, "Rules of Practice", a copy of this letter and the enclosure will be placed in the NRC 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,


for James G. Keppler
Regional Administrator

Enclosure:
Notice of Violation and
Proposed Imposition of Civil Penalty

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Commonwealth Edison Company
Dresden Nuclear Power Station
Unit No. 2

Docket No. 50-257
License No. DPR-19
EA 83-103

A special inspection of activities at the Dresden Nuclear Power Station, Unit No. 2, conducted during the period June 6 through September 8, 1983 disclosed that Commonwealth Edison Company failed to apply the quality assurance requirements of Appendix B to 10 CFR Part 50 to the procurement and installation of the torus-to-drywell vacuum breaker actuation arm shaft seals, which provide a primary containment boundary. Consequently, seals which were not purchased in accordance with Appendix B were installed in 1981 and were in service during the entire 1981-1983 operating cycle. These seals failed during the integrated leak rate test performed at the conclusion of the operating cycle in 1983. The test failure demonstrated that during the operating cycle the seals were unable to perform their function of maintaining containment integrity under elevated containment pressure conditions.

The seals were replaced during the 1983 outage and were again not procured pursuant to Appendix B. To emphasize the importance of properly identifying and controlling components subject to the requirements of Appendix B, the NRC proposes to impose a civil penalty in the cumulative amount of \$50,000. The base civil penalty for a Severity Level III event is \$40,000. However, after considering the lack of prompt and complete corrective action in response to this event, especially in light of the prior notice of similar events and issues stated in NRC Inspection Report No. 50-237/82-20(DPRP), the base civil penalty has been increased by 25%. In accordance with the General Policy and Procedure for NRC Enforcement Actions (Appendix C to 10 CFR Part 2), 47 FR 9987 (March 9, 1982), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violation and associated civil penalty is set forth below:

10 CFR 50, Appendix B, Criterion II requires, in part, that licensees identify components covered by the Quality Assurance Program and that the program provide control over activities affecting those components to an extent consistent with their importance to safety. The licensee's NRC-approved quality assurance program, Topical Report CE-1-A, commits to Regulatory Guide 1.33 (1972) which endorses ANSI N45.2-1971. ANSI N45.2-1971, Paragraph 2, indicates that the quality assurance program shall identify items to which the program applies and shall provide for the assurance of quality consistent with requirements considering such factors as the importance of malfunction or failure of the items to plant safety.

Contrary to the above, the licensee failed to (1) identify the shaft arm seals of the torus-to-drywell vacuum breakers as components covered by the quality assurance program and (2) provide controls over those components commensurate with their importance to safety. As a result, in 1981, replacement seals were not procured and installed in accordance with the requirements of Appendix B. In 1983, those seals failed during a containment integrated leak rate test. After that failure, the licensee again procured replacement seals which did not meet the requirements of Appendix B.

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

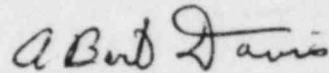
Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison Company is hereby required to submit to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of this Notice a written statement or explanation, including 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. 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, Commonwealth Edison Company may pay the civil penalty in the amount of \$50,000 or may protest imposition of the civil penalty, in whole or in part, by a written answer. Should Commonwealth Edison Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalty proposed above. Should Commonwealth Edison elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer 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 contained in Section IV(B) of 10 CFR Part 2, Appendix C, 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 statements or explanations by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Commonwealth Edison Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedures for imposing a civil penalty.

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

FOR THE NUCLEAR REGULATORY COMMISSION



for James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 18 day of November 1983



Commonwealth Edison

One First National Plaza, Chicago, Illinois

Address Reply to: Post Office Box 767

Chicago, Illinois 60690

January 20, 1984

Mr. R. C. DeYoung, Director
Office of Inspection and
Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Dresden Station Unit 2
Response to Notice of
Violation Inspection Report
No. 50-237/83-17
NRC Docket No. 50-237

Reference (a): J. G. Keppler letter to J. J.
O'Connor dated November 18, 1983.

Dear Sir:

This letter is in response to a special safety inspection conducted during the period June 6 through September 8, 1983 of activities at Dresden Station Unit 2. Reference (a) indicated that certain activities appeared in noncompliance with NRC requirements. The Commonwealth Edison response to the Notice of Violation is provided in the enclosure.

In our review of this issue, we agree with the NRC that the shaft arm seals of the torus-to-drywell vacuum breakers were not procured as safety-related components in accordance with 10 CFR 50, Appendix B. However, the purpose of the NRC enforcement program, as described in 10 CFR Part 2, is to promote and protect the health and safety of the public. Consistent with that aim, the Severity Level of any violation should be characterized by the safety significance of the event. In this matter we do not believe the characterization of the event as a Severity Level III violation is appropriate. This conclusion stems from that fact that, although we exceeded the allowable primary containment leakage rate in Section 3.7.2 of the Technical Specifications, our own conservative calculations showed that had a release occurred it would not have exceeded Part 100 guidelines. The safety significance of this event should be based on 10 CFR Part 100 criteria and not on the conservative limits set within the Technical Specifications. These leakage limits, as noted in the bases of the Technical Specifications, are conservatively derived from Part 100 limits and, therefore, we are being unnecessarily penalized because of conservative Technical Specifications.

In summary, we believe that the safety significance of the event does not warrant a Severity Level III civil penalty. Pursuant to 10 CFR 2.205, we hereby request that the NRC reclassify the event as a Severity Level IV non-compliance.

January 20, 1984

Finally, we were asked to address three unresolved items identified in Inspection Report No. 50-237/83-17. Our response to all three items, as it applies to Dresden Station, is detailed in the attachment to this letter. Two of the items, the requirement to ensure the adequacy of specifications in procurement documents to assure spare/replacement parts are at least equivalent to the original parts, and the use of generic parts classifications, are applicable to all CECO stations. For the first of these two items - the requirement to ensure the adequacy of procurement documents - all sites will review and revise, as necessary, their receiving inspection procedures to include additional guidance as noted in Dresden's response. Additionally, all sites will prepare as required an administrative procedure(s) to ensure the adequacy of our procurement documents for spare/replacement parts. As for the second item, all stations have received a revised generic parts classification list which contains a special caution on the use of the list. We believe this revised generic list will satisfy your concern. All procedure changes will be completed and implementation begun by March 15, 1984 at all the sites.

If you have any further questions regarding this matter, please direct them to this office.

Very truly yours,



Cordell Reed
Vice-President

BR/lm

cc: NRC Resident Inspector - Dresden
J. G. Keppler - Region III

Attachment

ATTACHMENT

COMMONWEALTH EDISON COMPANY

RESPONSE TO NOTICE OF VIOLATION

NRC DOCKET NO. 50-237

The item of noncompliance identified in the enclosure to the NRC letter, dated November 18, 1983 is responded to in the following paragraphs:

ITEM OF NONCOMPLIANCE

10 CFR 50, Appendix B, Criterion I requires, in part, that licensees identify components covered by the Quality Assurance Program and that the program provide control over activities affecting those components to an extent consistent with their importance to safety. The licensee's NRC approved Quality Assurance Program, Topical Report CE-1-A, commits to Regulatory Guide 1.33 (1972) which endorses ANSI N45.2-1971, and ANSI N45.2, Paragraph 2, indicates that the Quality Assurance Program shall identify items to which the program applies and shall provide for the assurance of quality consistent with requirements considering such factors as the importance of malfunction or failure of the items to plant safety.

Contrary to the above, the licensee failed to (1) identify the shaft arm seals of the torus-to-drywell vacuum breakers as components covered by the Quality Assurance Program and (2) provide controls over those components commensurate with their importance to safety. As a result, in 1981, replacement seals were not procured and installed in accordance with the requirements of Appendix B. In 1983, those seals failed during a containment integrated leak rate test. After that failure, the licensee again procured replacement seals which did not meet the requirements of Appendix B.

Admission or Denial of Alleged Violation

Commonwealth Edison admits that, in 1981, replacement vacuum breaker actuation arm shaft seals were not procured totally in accordance with the requirements of 10 CFR 50, Appendix B, Criterion II. However, upon review of the severity categories as described in 10 CFR 2, Part VI, Supplement I (Part 50 - Facility Operations), it appears that severity category IV is most applicable, particularly since calculations indicated that 10 CFR 100 limits were not exceeded given a design basis accident even though the Limiting Condition of Operation (LCO) in Technical Specification Section 3.7.2 was exceeded.

REASON FOR THE VIOLATION

Two distinct reasons were evident for this event. First, the original equipment manufacturer (OEM) Atwood and Morrill Co., Inc. who has an approved Q.A. program, supplied three (3) different sets of shaft arm seals to Dresden during the past several years under the same part number. Secondly, Dresden Station misinterpreted the Station Nuclear Engineering Department (SNED) safety-related parts list for use in safety-related components.

The shaft arm seals installed during the 1981 Unit 2 Refueling Outage on six (6) vacuum breakers consisted of 3 pieces (2 end pieces and 1 internal chevron). The 3 piece seals were supplied by the OEM under the same part number as the original 4 piece seals. A six (6) piece set was also received from the OEM under the same part number but was never used. The 3 and 6 piece sets were later determined to be more applicable to high pressure than to low pressure applications although no specific vendor qualifications for the seals were available. The valve drawing specifies the 4 piece set. All seals were ordered by part number and a certificate of conformance certifying the part number was received with the 3 piece and 6 piece sets.

On May 8, 1975, Commonwealth Edison's Station Nuclear Engineering Department (SNED) issued a spare parts and materials guideline for safety-related equipment. As part of this guideline, packing materials were inappropriately considered to be generically classified as non-safety related. As a result, the torus-to-drywell vacuum breaker actuation arm shaft seals were classified as non-safety related.

On December 29, 1982, a meeting was held at the Commonwealth Edison Company (CECo) Corporate Office to discuss the procedures for review of the classification of all parts if they are used in safety-related components. It was agreed that each operating station would develop procedures which would outline the proper methodology for: (1) performing technical reviews of spare parts, (2) determining their classification in accordance with criteria provided by SNED, and (3) providing administrative control of a spare parts classification list. Dresden Station implemented station procedures for these items as of May 1, 1983.

To clarify on a generic basis the non-safety related parts that could be used in safety-related components, SNED issued a partial list on February 9, 1983. Packing was not included until the total list was reissued on March 2, 1983. Packing was then included on the list but identified as material that might be safety-related in some applications. In such cases, the production stores parts listing was expected to be examined prior to ordering the part to determine if a safety-related stores item number existed for a part having a similar application. If the part was found listed in the production stores list and had a safety-related stores item number, the part classification was to be reviewed for correctness. Dresden Station implemented this guidance in July, 1983 after a thorough review of its effect on station procedures.

Corrective Actions Taken and Results Achieved

As a result of this event, Dresden Station reclassified the vacuum breaker shaft seals as safety-related on July 8, 1983, and adopted a new interpretation of the generic parts list for material such as packing using a failure mode analysis.

On August 2, 1983, SNED again revised the list of generic non-safety related parts for use in safety-related components. This revision, in addition to the changes described above, included special instructions for using the generic list. A Caution was also applied to the list on October 3, 1983, which was issued to each CECO Nuclear Power Station for implementation.

CAUTION: Before applying the generic non-safety related classification to any specific part, consideration should be given to the function of the part. This consideration does not necessarily require a full "safety classification checklist" evaluation; however, some documentation should be maintained. Specific consideration shall be given to determine any unique safety-related function of the generic part in the specific component.

Prompt and extensive corrective actions were taken in response to this event. Both the cause of the event was determined and the replacement seals were demonstrated acceptable for the pressure conditions through a testing program at Dresden coupled with a successful primary containment Integrated Leak Rate Test (ILRT) prior to Unit 2 startup. The seal installation and testing was done under a safety-related work package and per 10 CFR 50, Appendix J requirements.

Additional corrective actions taken following the event are as follows:

1. All twelve (12) Unit 2 torus to drywell vacuum breaker actuation arm seal pairs were disassembled and inspected. The shaft seals on the six (6) vacuum breakers which were observed to be leaking consisted of 3 pieces (2 end pieces and 1 internal chevron). The remaining six (6) vacuum breakers contained the original design 4 piece seal (2 end pieces and 2 internal chevrons).
2. Through a parts inventory of the seals and a Mechanical Maintenance activities review, each of the 3, 4 and 6 piece seal assemblies received at Dresden were dispositioned. At no time was an improper set used on any other drywell to torus vacuum breaker other than the six (6) identified on Unit 2. To ensure the accountability of the seals was correct, three (3) vacuum breakers were randomly selected to be disassembled and inspected

on Unit 3 during an outage of sufficient length (greater than 72 hours). (A successful ILRT was conducted prior to startup of Unit 3 at the conclusion of the last refueling outage.) Examination at a subsequent outage showed the seals to be of the 4 piece set.

3. Upon further investigation it was determined that the seals furnished by the OEM were more suitable for a high pressure application than for low pressure applications. All twelve vacuum breaker shaft seals were replaced with 3-piece teflon seals supplied by the John Crane Company, which are similar to the Atwood-Morrill 3-piece seals but more pliable and suitable for a low pressure application.
4. Following the installation of the John Crane seals, a new LLRT program was established based on experimental results using the Atwood-Morrill 3-piece and 4 piece packing assemblies. It was determined that if the seals were pressurized to 75 psig and held for a period of 15 minutes with no appreciable pressure decay or lubricant leakage, the seals were suitable for service. In addition, the required LLRT and ILRT were satisfactorily completed per 10 CFR 50, Appendix J and Technical Specification 3.7.2.b. The additional LLRT has been incorporated into the appropriate Dresden procedures for future testing at Dresden.
5. A review of all other LLRT (Type B test) boundaries, test time requirements and the type of valve packing being tested was completed to determine if a similar problem might exist. None were identified, and we believe the inadequacy of the original LLRT was an isolated event.
6. A memorandum was issued to maintenance and stores personnel advising them to be alert to differences between old and new stock and differences between parts removed and parts being installed. This memorandum will be incorporated into the appropriate Dresden Administrative Procedure by March 15, 1984.
7. On July 8, 1983 the John Crane Company seals installed on Unit 2 were upgraded to the safety-related classification per the component classification procedure implemented on May 1, 1983. The seal LLRT testing program developed to demonstrate the new seal integrity on Unit 2 prior to the ILRT was incorporated into the evaluation process of the seals.
8. Off-site dose calculations were performed. The results demonstrated that 10 CFR 100 limits would not have been exceeded at the site boundary had a postulated accident occurred.

Corrective Action Taken to Avoid Further Violations and Response to Unresolved Items

Since May 1, 1983 two new Dresden Administrative Procedures (DAPs) were incorporated into the Dresden Station Quality Program: (1) DAP 11-4, "Supplemental Listing of Safety- Related (SR), Non-Safety Related (NSR) and American Society of Mechanical Engineering (ASME) Code-Related Systems, Structures and Components", and (2) DAP 11-5, "Supplemental Listing of Non-Safety Related (NSR) Subcomponents/Parts Used On/In Safety-Related (SR) Systems, Structures and Components". To further enhance this program and to address three (3) unresolved items identified in I.E. Inspection Report no. 50-237/83-17, the following actions are planned:

Unresolved Item #1

The licensee will establish the ability of the currently installed seals and grease in Dresden Units 2 and 3 to perform their safety-related function under service conditions expected during the design basis event. The licensee will complete temperature and radiation qualification during the 1983 Dresden Unit 3 refueling outage. Pending completion of licensee efforts and NRC review, this item is unresolved (237/83-17-02).

Response

At the present time, Commonwealth Edison has initiated a testing program in which the vacuum breaker seals and the grease used with the seals will be qualified under the environmental conditions expected during a design-basis event. These are functional tests which are being performed with a mock-up of the vacuum breaker's stuffing box. The material testing will include the John Crane "3-ring" seal set currently in use in Unit 2, the John Crane "4-ring" seal sets planned for use in Unit 3, and the Dow Corning 111 lubricant. Also samples of the Atwood and Morrill "4-ring" seal sets now installed on Unit 3 will be set aside and scheduled for testing should the feasibility of deleting all of them during the Unit 3 Refueling Outage come into question. Finally, the experimental bronze bushing/EPR O-ring seal will also be prepared and scheduled for testing. This testing will be performed at Argonne National Laboratory and the results will be completed by March 15, 1984.

Unresolved Item #2

The adequacy of specifications in procurement documents in assuring that spare/replacement parts ordered from original equipment suppliers without approved Q.A. programs are equivalent or superior to originally installed components needs to be verified for all CECO nuclear facilities. Pending completion of licensee efforts and NRC review, this item is unresolved (237/83-17-03).

Response

The requirement to ensure the adequacy of specifications for spare/replacement parts purchased from original equipment manufacturers (OEM) without an approved Quality Assurance Program is presently contained in our Quality Assurance Manual Section QP 4-51. In order to increase the effectiveness of the procedures implementing this requirement, two supplemental measures will be taken. Dresden's receiving inspection procedures will be revised to include guidelines that ensure parts are the same as, or equivalent to, those in the original component. Also, the memorandum previously issued by the Maintenance Assistant Superintendent will be incorporated into our procedure for work requests (DAP 15-1) to provide an additional method of identifying spare/replacement parts concerns.

Two additional areas of concern were identified during review of this item. These areas are situations where the original equipment manufacturer (OEM) has changed a safety-related replacement part or when a safety-related spare part is being purchased from an alternate supplier. To ensure the adequacy of spare/replacement parts used in these situations, an administrative procedure will be written to provide a technical review of part adequacy and to ensure an appropriate specification is provided. This procedure will be used in conjunction with the receipt inspection and work request procedures. These corrective actions will be implemented by March 15, 1984.

Unresolved Item #3

The licensee will evaluate for all CECOs stations the potential for circumvention of the classification review of non-safety related parts used in safety-related systems by the use of generic classifications. Pending completion of licensee efforts and NRC review, this item is unresolved (237/83-17-04).

Response

The existing SNED generic parts list will be revised at Dresden to only include items which have a low probability of being safety-related. All remaining parts will be subject to individual review as required by Dresden procedure DAP 11-5. In addition, parts which remain on the generic list will receive a review by the Quality Control

Department to determine if any circumstances exist which would require the part to have further review per DAP 11-5. This review will be incorporated into the existing procedure (DAP 15-1) which presently requires that Quality Control determine if a part has been previously evaluated by reviewing the parts classification which includes the generic list. The guidelines for determination of need for further review have been provided by SNED. The generic parts list and DAP 15-1 revisions will be made by March 15, 1984.

Date When Full Compliance Will Be Achieved

All corrective action items identified, if not previously noted, will be completed by March 15, 1984.

7954N



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

MAR 23 1984

Docket No. 50-237
License No. DPR-19
EA 83-103

Commonwealth Edison Company
ATTN: Mr. Cordell Reed
Vice President
Post Office Box 767
Chicago, IL 60690

Gentlemen:

This acknowledges receipt of your letter dated January 20, 1984, in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you with our letter dated November 18, 1983. The Notice of Violation concerned violations reviewed during a special inspection conducted at Dresden Nuclear Power Station, Unit 2 during the period June 6 through September 8, 1983 and a proposed civil penalty in the amount of \$50,000 for those violations.

After careful consideration of your response, and for the reasons given in the enclosed Order and its Appendix, we have concluded that the violation did occur as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty. No adequate reasons have been provided for not imposing the civil penalty proposed for the violation. Accordingly, we hereby serve the enclosed Order on Commonwealth Edison Company imposing a civil penalty in the amount of Fifty Thousand Dollars (\$50,000).

In accordance with Section 2.790 of the NRC's "Rules of Practice," 10 CFR 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,

A handwritten signature in cursive script, appearing to read "R.C. DeYoung".

Richard C. DeYoung, Director
Office of Inspection and
Enforcement

Enclosures:

1. Order Imposing Civil Monetary Penalty
2. Appendix - Evaluation and Conclusions

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

Commonwealth Edison Company
Dresden Nuclear Power Station
Unit 2

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Docket No. 50-237
License No. DPR-19
EA 83-103

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Commonwealth Edison Company (the "licensee") is the holder of Operating License No. DPR-19 issued by the Nuclear Regulatory Commission (the "Commission") that authorizes the licensee to operate the Dresden Nuclear Power Station, Unit 2, in accordance with the conditions specified therein. The license was issued on December 22, 1969.

II

A special inspection of the licensee's activities under the license was conducted during the period June 6 through September 8, 1983. As a result of this inspection, it appears that the licensee has not conducted its activities in full compliance with the conditions of its license. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated November 18, 1983. The Notice states the nature of the violation, requirements of the Commission that the licensee had violated, and the amount of civil penalty proposed for the violation. An answer dated January 20, 1984, to the Notice of Violation and Proposed Imposition of Civil Penalty was received from the licensee.

III

Upon consideration of Commonwealth Edison Company's response and the statements of fact, explanation, and argument contained therein, as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined that the penalty proposed for the violation 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 (42 U.S.C. 2282, PL 96-295), 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 thirty 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 of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

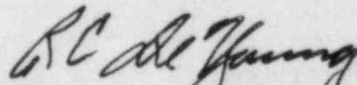
V

The licensee may, within thirty days of the date of this Order, request a hearing. A request for a hearing shall be addressed to the Director, Office

of Inspection and Enforcement. A copy of the hearing request shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555. If a hearing is requested, the Commission will issue an Order designating the time and place of hearing. If the licensee fails to request a hearing within thirty days of the date of this Order, the provisions of this Order shall be effective without further proceedings and, 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



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 23rd day of March 1984

APPENDIX

EVALUATION AND CONCLUSIONS

On November 18, 1983 the NRC issued a Notice of Violation and Proposed Imposition of Civil Penalty to the Commonwealth Edison Company for violations identified at the Dresden Nuclear Power Station. Commonwealth Edison's response to the Notice dated January 20, 1984 has been reviewed by the NRC Staff. The Staff's evaluation of this response is presented below.

Summary of Licensee's Response

In its response the licensee admits that the violation occurred as described in the Notice of Violation; however, the licensee asserts that the violation should not be categorized at Severity Level III and requested the NRC to reclassify the violation as a Severity Level IV. The licensee stated, "The Severity Level of any violation should be characterized by the safety significance of the event. In this matter we do not believe the characterization of the event as a Severity Level III violation is appropriate. This conclusion stems from the fact that, although we exceeded the allowable primary containment leakage rate in Section 3.7.2 of the Technical Specifications, our own conservative calculations showed that had a release occurred it would not have exceeded Part 100 guidelines. The safety significance of this event should be based on 10 CFR Part 100 criteria and not on the conservative limits set within the Technical Specifications. These leakage limits, as noted in the bases of the Technical Specifications, are conservatively derived from Part 100 limits and, therefore, we are being unnecessarily penalized because of conservative Technical Specifications."

NRC Evaluation

As described in the Notice, the violation was not based on allowable primary containment leakage rates but instead on whether the quality assurance requirements of 10 CFR Part 50, Appendix B, were met. The licensee failed to classify vacuum breaker shaft arm seals in accordance with 10 CFR Part 50, Appendix B, and failed to ensure that the seals would perform their safety function if called upon in an event. The licensee's assumption that the leak rate under accident conditions would be the same as those observed during 10 CFR Part 50, Appendix J, tests cannot be supported. The seals were not qualified to function in an environment that could exist during an accident condition. Therefore, the leak rate under these conditions was indeterminate. The General Policy and Procedure for NRC Enforcement Actions (10 CFR Part 2, Appendix C), Supplement I, Section C.2, cites as an example of a Severity Level III violation, "A system designed to prevent or mitigate a serious safety event not being able to perform its intended function under certain conditions (e.g., ...materials or components not environmentally qualified)." Since the seals had not been qualified to perform within an accident environment, this violation has been properly classified at Severity Level III.

Conclusion

As discussed above, the violation did occur as described in the Notice and the violation was correctly classified as a Severity Level III in accordance with the NRC Enforcement Policy.

The licensee has not provided adequate reason to justify mitigation of the proposed civil penalty.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

December 21, 1983

Docket No. 50-373
EA 83-134

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

Gentlemen:

This refers to the special safeguards inspection conducted by Mr. G. L. Pirtle of the Region III staff on October 18-21, 1983 of activities at the LaSalle Nuclear Power Station, Unit 1, authorized by NRC Operating License No. NPF-11. The results of this inspection were discussed on November 10, 1983 during an Enforcement Conference held at the NRC Region III office between Mr. D. Galle and other members of your staff and Mr. J. A. Hind and other members of the Region III staff.

This inspection revealed that you did not adequately control an access point into vital areas of your facility. We are concerned that the access control measures in place at the time of the incident did not provide the level of protection described in your security plan.

To emphasize the need to ensure that the approved security plan is followed and that you are cognizant of the potentially serious consequences of possible unauthorized entry into vital areas, we propose to impose a civil penalty for Item I as set forth in the Notice of Violation enclosed with this letter. No civil penalty is proposed for Item II.

The violations in the enclosed Notice have been categorized at the severity levels described in the General Policy and Procedure for NRC Enforcement Actions (10 CFR Part 2, Appendix C). The base value for a Severity Level III violation is \$40,000. However, in accordance with the NRC enforcement policy, and after considering your prompt and extensive corrective action which included the addition of clearer markings on the vital area in question, regular checks of vital area portals during patrols, a survey of other vital areas for similar problems, and a revision to the Security Plan to accomplish the above, the amount of the civil penalty has been reduced by 50%. The civil penalty has been reduced an additional 25% because you identified the violation and promptly reported it to the NRC. Additional reduction of the civil penalty for licensee-identification of the violation is not warranted because the licensee was unable to determine how long the hatch had not been secured due to the lack of an alarm and not checking the hatch on a routine basis. After consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Ten Thousand Dollars.

**Enclosure Contains
SAFEGUARDS INFORMATION
Upon Separation This
Page Is Decontrolled**

December 21, 1983

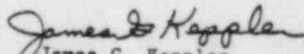
In your response to this letter, please follow the instructions in the Notice. Your response should specifically address corrective actions you have taken or plan to take for ensuring that access portals are adequately controlled.

Your written reply to this letter and Notice of Violation and the findings of our continuing inspections of your activities will be considered in determining whether further enforcement action is appropriate.

Areas examined during this inspection concern a subject matter which is exempt from disclosure according to Section 73.21(c)(2) of the NRC's "Rules of Practice," Part 73, Title 10, Code of Federal Regulations. This information must be handled and protected in accordance with the provisions of 10 CFR 73.21. Consequently, the enclosure to this letter, our report of this inspection, and your response to the noncompliance identified in the enclosure to this letter will not be placed in the Public Document Room. Therefore, your statement of corrective action should be submitted as a separate enclosure to your transmittal letter in the manner prescribed.

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 G. Keppler
Regional Administrator

Enclosures:

1. Notice of Violation and
Proposed Imposition of
Civil Penalty
(UNCLASSIFIED SAFEGUARDS INFORMATION)
2. Inspection Report
No. 50-373/83-45(DRMSP);
(UNCLASSIFIED SAFEGUARDS INFORMATION)

Enclosure Contains
SAFEGUARDS INFORMATION
Upon Separation This
Page is Decontrolled

cc w/encls:

- D. L. Farrar, Director
of Nuclear Licensing
- D. L. Shamblin, Site
Construction Superintendent
- T. E. Quaka, Quality
Assurance Superintendent
- G. J. Diederich, Station
Superintendent
- R. H. Holyoak, Project
Manager



Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

January 18, 1984

**SECURITY MARKING DOES NOT APPLY WHEN THE
LETTER IS SEPARATE FROM THE ENCLOSURE**

Mr. R. C. DeYoung, Director
Office of Inspection and
Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: LaSalle County Station Unit 1
Response to Notice of Violation
and Civil Penalty
NRC DOCKET NO. 50-373

Reference (a): J. G. Keppler letter to J. J. O'Connor
dated December 21, 1983.

Dear Mr. DeYoung:

By this letter, Commonwealth Edison Company responds to the Notice of Violation and Imposition of Civil Penalty by the NRC, the Special Inspection Report, and its accompanying letter (Reference (a)) regarding the occurrence that resulted in an access point to the station's vital area not being locked, alarmed or guarded. In accordance with 10 CFR 2.201, this response is submitted within 30 days as specified.

Commonwealth Edison Company understands the significance of the violation cited in the Notice. Upon reviewing the configuration of LaSalle's "Vital Island" the existence of this potential access point went unrecognized.

As described in Attachment A to this letter, LaSalle County Station instituted an in depth review of the "Vital Island" barrier to determine if any other potential access points to the "Vital Island" existed. Corrective actions were completed to assure that the Station is in compliance to the commitments in Sections 5.3, 7.2.1 and 7.3.3 of the approved Station Security Plan.

Enclosed in this letter is a Commonwealth Edison Company check for \$10,000 for the Civil Penalty as set forth in your Notice of Violation, dated December 21, 1983.

**SECURITY MARKING DOES NOT APPLY WHEN THE
LETTER IS SEPARATE FROM THE ENCLOSURE**

SECURITY MARKING DOES NOT APPLY WHEN THIS
LETTER IS SEPARATE FROM THE ENCLOSURE

R. C. DeYoung

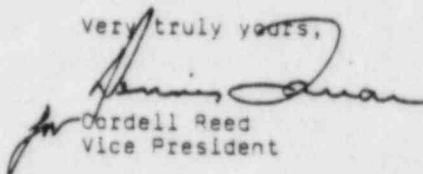
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January 18, 1984

In summary, Commonwealth Edison reaffirms its commitment to proper security measures as submitted in the LaSalle County Station Security Plan. Through the measures we have described in Attachment A, we believe that an occurrence of a similar nature will be prevented. Continued surveillances will verify continued compliance to the commitments.

If there are any questions regarding this matter, please contact this office.

Very truly yours,



Cordell Reed
Vice President

lm

Attachment & Enclosure

cc: Mr. J. G. Keppler, Region III
NRC Resident Inspector- LSOS
G. Benson, Regulatory Affairs

6006N

SECURITY MARKING DOES NOT APPLY WHEN THIS
LETTER IS SEPARATE FROM THE ENCLOSURE



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

DEC 27 1983

Georgia Power Company
ATTN: Mr. R. J. Kelly
Executive Vice President
P.O. Box 4545
Atlanta, GA 30302

Gentlemen:

SUBJECT: PROPOSED IMPOSITION OF CIVIL PENALTIES: EA 83-86
IMPROPER SHUTDOWN (REFERENCE: INSPECTION REPORT NO. 50-366/83-23)

The enclosed Notice of Violation and Proposed Imposition of Civil Penalties is based upon the findings of an NRC special inspection. The inspection examined the circumstances associated with the improper shutdown of Hatch, Unit 2, on July 14, 1983.

This inspection was conducted by the NRC Resident and Region-based inspectors on July 14 and 15, 1983 to review the circumstances of the improper shutdown of your Hatch Unit 2 reactor on July 14, 1983 (the findings are set forth in Inspection Report No. 50-366/83-23). The detailed findings of this inspection were discussed at the site with facility management at the conclusion of the inspection. In addition, NRC safety concerns were discussed during enforcement conferences held in the Region II office in Atlanta, Georgia, on July 21, 1983, at Plant Hatch on November 2, 1983, and in the NRC offices in Washington, D.C. on November 14, 1983.

The findings of the inspection revealed that on July 14, 1983, while Unit 2 was being returned to service, a problem was experienced with main condenser vacuum. This problem required a reduction in reactor power to avoid a reactor shutdown. The on-shift operators and their supervisors recognized that the normal method of reducing power would not achieve a sufficiently timely power reduction to avoid a scram. These individuals, apparently strongly influenced by advice from two shift technical advisers, made a "consensus decision" to achieve the necessary rapid power reduction by bypassing both the Rod Worth Minimizer and the Rod Sequence Controller and by selectively scrambling individual control rods, without an approved procedure, from the Scram Time Test Panel which is out of sight of, and out of normal voice communications with, the reactor control console. The "consensus decision" and the resulting actions resulted in a control rod configuration that had not been analyzed from a reactor safety viewpoint.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

To emphasize the level of unacceptability of the manner in which the reactor was controlled on July 14, 1983, and after consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of One Hundred Thousand Dollars based upon the findings of the first inspection. Three separate violations were identified and a separate civil penalty could have been assessed for each. However, since all three violations stemmed from the same fundamental problem, the violations have been classified together as a Severity Level II problem (Supplement I) pursuant to the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, and a single civil penalty is proposed. The base penalty of \$64,000 has been escalated to \$100,000 because of the seriousness of this event, the number of Technical Specifications that were violated, and the number of licensed operators and supervisors involved.

You are required to respond to the Notice and should follow the instructions specified therein when preparing your response. The sequence of events that occurred on July 14, 1983 gives rise to a number of questions which the NRC believes must be addressed by the Georgia Power Company. First, has the Georgia Power Company's policy of "safety first" been compromised by improper consideration by individual members of the Plant Hatch staff of "keeping the plant running" without proper consideration of overall plant safety? Second, has the Georgia Power Company's policy of strict adherence to approved operating procedures been compromised at Plant Hatch by individual supervisors and managers and has an effective system of audits been implemented to assure compliance with the policy? Third, is each operations supervisor fully aware of his/her individual responsibilities for making decisions? Fourth, is the role and the authority of the shift technical adviser clear to them and to each operations supervisor? And finally, is each licensed operator aware of the importance of adherence to Technical Specifications and knowledgeable of approved interpretations of those Technical Specifications? Your response to the attached Notice of Violation and Proposed Imposition of Civil Penalties should address, in detail, each of these questions with particular emphasis on assuring good vertical communications between Plant Hatch in Baxley, Georgia, and the corporate offices in Atlanta, Georgia. It is further requested that you provide sufficient information on these specific matters so that we may conclude that your corrective actions will be effective over the long run. Your reply to this letter, and the results of future inspections, will be considered in determining whether further action is appropriate.

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 Notice of Violation will be placed in the NRC's Public Document Room.

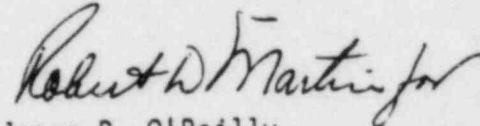
DEC 27 1983

Georgia Power Company

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The responses directed by this letter and the enclosure 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 P. O'Reilly
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalties

cc w/encl:
J. T. Beckham, Vice President and
General Manager-Nuclear Generation
H. C. Nix, Site General Manager
C. E. Belflower, Site QA Supervisor

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Georgia Power Company
Hatch Unit 2

Docket No. 50-366
License No. NPF-2
EA 83-86

A special inspection conducted at Hatch Unit 2 on July 14 and 15, 1983 disclosed that while Unit 2 was being returned to service, a problem was experienced with main condenser vacuum. This problem required a reduction in reactor power to avoid a reactor shutdown. The on-shift operators and their supervisors recognized that the normal method of reducing power would not achieve a sufficiently timely power reduction to avoid a scram. These individuals, apparently strongly influenced by advice from two shift technical advisers, made a "consensus decision" to achieve the necessary rapid power reduction by bypassing both the Rod Worth Minimizer and the Rod Sequence Controller and by selectively scrambling individual control rods, without an approved procedure, from the Scram Time Test Panel which is out of sight of, and out of normal voice communications with, the reactor control console. The "consensus decision" and the resulting actions resulted in a control rod configuration that had not been analyzed from a reactor safety viewpoint.

To emphasize the need to adhere to facility operations' and administrative procedures and to upgrade plant management control systems relating to licensed personnel, shift technical advisers, and supervisor's decision-making responsibilities, NRC proposes to impose a civil penalty in the amount of \$100,000 for the matter of the improper reactor shutdown event on July 14, 1982. In accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, the violations and the associated civil penalties are set forth below:

- A. Technical Specification 6.8.1 states that procedures shall be written, approved and implemented for reactor operations.

Contrary to the above, on July 14, 1983, control rod manipulations were conducted in violation of written and approved procedures, resulting in control rod patterns outside those analyzed for the Rod Drop Accident described in FSAR chapter 15.1.38. These manipulations were improperly accomplished by scrambling control rods from the scram time test panel (2H11-P610) and inserting control rods using the Emergency In switch instead of the approved procedural method of inserting control rods in notch control from the main control panel (2H11-P603).

Examples of procedures which were not followed include:

- 1) Procedure, HNP-2-34, Rules for Performing Procedures, requires that verbatim compliance is mandatory (Paragraph 13.2) and that, if an approved procedure cannot be performed as written, stop and change the procedure. On July 14, 1983, Procedures HNP-2-9402 and HNP-2-9207 were not being followed verbatim nor was the event stopped, and the procedures were not changed.

- 2) Procedure, HNP-2-9402, Control Rod Scram Testing, requires, in step E.17, return of the scrambled rod to its initial position prior to scrambling the next rod. On July 14, 1983, the rods scrambled from the time test panel (2H11-P610) were not being returned to their initial position prior to scrambling the next rod.
- 3) Procedure, HNP-2-9207, Control Rod Movement, Paragraph D.4 and Data Sheet 1 requires notch control for rods identified with an asterisk. This asterisk was on all rod groups moved during the shutdown of July 14, 1983, up to the point where the reactor manual scram was initiated, and these movements were not conducted by notch control.
- 4) Procedure, HNP-2-9207, Control Rod Movement, Paragraph E.5 requires that rod movement be stopped if proper operation of the Rod Sequence Control System (RSCS) is not confirmed. On July 14, 1983, rod movement was continued even though the RSCS was circumvented and therefore inoperative.

- B. Technical Specification 3.1.4.1 requires the Rod Worth Minimizer (RWM) to be operable or a second licensed operator or other qualified member of the technical staff to be present at the reactor console to verify compliance with the prescribed control rod pattern.

Contrary to the above on July 14, 1983, after bypassing the RWM, a second person did not verify compliance with the prescribed rod pattern. As a consequence, the rod insertion sequence was violated as evidenced by Control Rod 42-39 at notch 12 versus the required notch 48.

- C. Technical Specification 3.1.4.2 requires that the Rod Sequence Control System (RSCS) be operable in Operation Condition 1 when thermal power is below 20%.

Contrary to the above, on July 14, 1983, while in Operation Condition 1, with thermal power below 20%, the RSCS was not operational in that it was not performing its intended function of notch control. The required notch control was circumvented by use of the Emergency In switch and the scram switches on the scram time test panel.

Collectively, the above violations have been evaluated as a Severity Level II problem. (Supplement I)

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

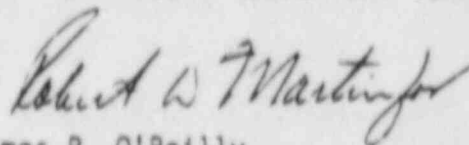
Pursuant to the provision of 10 CFR 2.201, Georgia Power Company is hereby required to submit to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II, within 30 days of the date of this Notice a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violations; (2) the reasons 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. 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, the response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Georgia Power Company may pay the civil penalties in the cumulative amount of \$100,000 or may protest imposition of the civil penalties in whole or in part by a written answer. Should Georgia Power Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties in the amounts proposed above. Should Georgia Power Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer 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 in whole or in part, such answer may request remission or mitigation of the penalties.

In requesting mitigation of the proposed penalties, the five factors addressed in Section IV(B) of 10 CFR Part 2, Appendix C 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 by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Georgia Power Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Upon failure to pay the cumulative penalties due, which have 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 penalties, unless compromised, remitted, or mitigated may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION



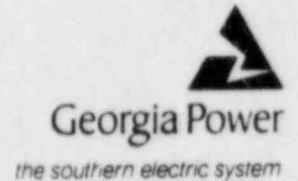
James P. O'Reilly
Regional Administrator

Dated at Atlanta, Georgia
this 17th day of December 1983

Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526-7020

Mailing Address:
Post Office Box 4545
Atlanta, Georgia 30302

J. T. Beckham, Jr.
Vice President and General Manager
Nuclear Generation



January 25, 1984

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

NRC DOCKET 50-366
OPERATING LICENSE NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNIT 2
RESPONSE TO ENFORCEMENT ACTION 83-86

Attention: Mr. Richard DeYoung, Director

Gentlemen:

Pursuant to the provisions of 10 CFR 2.201 Georgia Power Company (GPC) submits this response to the Notice of Violation and Proposed Imposition of Civil Penalties dated December 27, 1983 (the Notice).

We wish to emphasize that although three violations were cited, they arose out of one circumstance which involved the improper manipulation of control rods with the single objective of reducing power to avoid a reactor shutdown transient. Each violation cites a different Technical Specification which was violated as a result of the single event described in the Notice. The Nuclear Regulatory Commission (NRC) evaluated these violations collectively when arriving at the proposed civil penalty. We, therefore, wish to respond to the violations collectively.

Enclosed is full payment of the proposed civil penalty in the amount of \$100,000.00. Therefore, this response does not constitute a formal reply under the provisions of 10 CFR 2.205. However, Georgia Power Company does informally request that the NRC reconsider the amount of the civil penalty and reduce the amount of the penalty on the basis of the following considerations:

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- (a) The Civil penalty should be no more than the base penalty of \$64,000.00 under the factors of the enforcement policy, 10 CFR Part 2, Appendix C. The NRC escalated the penalty to \$100,000.00 based on three reasons: (i) the seriousness of the event, (ii) the number of Technical Specifications that were violated, and (iii) the number of personnel involved. None of these factors are among the five factors identified in Appendix C for adjusting the base penalty. The seriousness of the event is already reflected in the base penalty of the classification (i.e., plant operations) and severity level it represents. With respect to the number of Technical Specifications and personnel involved, the Notice previously stated that all violations stemmed from the same fundamental problem and, therefore, under Appendix C a single unescalated application of the base penalty is the appropriate amount despite the latter two reasons given for escalation.
- (b) The enforcement policy provides for the reduction of the civil penalty by up to 50% based on unusually prompt and extensive corrective action. Actions taken by GPC to control and prevent recurrence of such events fully support the intent of GPC to operate Plant Hatch in a safe manner. GPC promptly evaluated the event and its related root causes and implemented corrective actions in such a manner as to improve operator training and reactor safety. These actions support a reduction of the civil penalty. GPC believes that the corrective actions described in this response to the Notice are certainly timely and comprehensive, and show a significant degree of licensee initiative.

VIOLATION:

A special inspection conducted at Hatch Unit 2 on July 14 and 15, 1983, disclosed that while Unit 2 was being returned to service, a problem was experienced with main condenser vacuum. This problem required a reduction in reactor power to avoid a reactor shutdown. The on-shift operators and their supervisors recognized that the normal method of reducing power would not achieve a sufficiently timely power reduction to avoid a scram. These individuals,

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apparently strongly influenced by advice from two shift technical advisors, made a "consensus decision" to achieve the necessary rapid power reduction by bypassing both the Rod Worth Minimizer and the Rod Sequence Controller and by selectively scrambling individual control rods, without an approved procedure, from the Scram Time Test Panel which is out of sight of, and out of normal voice communications with, the reactor control console. The "consensus decision" and the resulting actions resulted in a control rod configuration that had not been analyzed from a reactor safety viewpoint.

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Examples of procedures which were not followed include:

1. Procedure, HNP-2-34, "Rules for Performing Procedures", requires that verbatim compliance is mandatory (Paragraph 13.2) and that, if an approved procedure cannot be performed as written, stop and change the procedure. On July 14, 1983, Procedures HNP-2-9402 and HNP-2-9207 were not being followed verbatim nor was the event stopped, and the procedures were not changed.

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2. Procedure, HNP-2-9402, "Control Rod Scram Testing", requires, in step E.17, return of the scrambled rod to its initial position prior to scrambling the next rod. On July 14, 1983, the rods scrambled from the time test panel (2H11-P610) were not being returned to their initial position prior to scrambling the next rod.
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RESPONSE:

Admission or Denial of the Alleged Violation: The violation did occur. While the violation occurred within the general context of the violation as stated, personnel and operators involved in the events always felt they were operating within the bounds of approved procedures.

Reason for Violation: Operating personnel failed to adequately follow procedures. Personnel used group discussion to make a "consensus decision" regarding action to be taken for reducing reactor power. In fact, these actions did not comply with the "intent" and "scope" of existing procedures. However, personnel and operators were not aware that actions taken were "outside" of analyzed conditions.

Georgia Power Company performed an indepth critique of this incident immediately following the event and an additional evaluation the following day with the personnel involved. The results of those critiques and actions taken as well as the impact of the events, are provided as follows:

A. Description of Event:

1. Unit 2 was being maintained at approximately 150 MWE during startup from a refueling outage. Scram time testing and air ejector trouble shooting had been in progress. Condenser vacuum suddenly began decreasing and the turbine was quickly unloaded and tripped. The operator began rapidly inserting rods to reduce power level as vacuum continued to decrease. It became apparent to the control room staff that unless power could be quickly decreased to within the limit of the mechanical vacuum pump so that it could be placed in service, vacuum would soon reach the reactor feed pump low vacuum trip point resulting in a loss of feedwater flow to the vessel, causing a reactor transient and possibly a challenge to a safety system. The cause of the vacuum decrease was not known. The reactor core isolation cooling (RCIC) system was inoperative at the time and the high pressure coolant injection (HPCI) system was operable, as allowed by Technical Specifications.

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B. Operator Actions Taken:

1. In order to reduce reactor power with the fastest possible control rod insertion rate, the rod worth minimizer (RWM) was bypassed, as allowed by Technical Specifications. A second operator was assigned to verify rod movements as required. It is now clear, however, that the functional requirement of the Technical Specification was not being met. Rod movement was being made from the front panel of the operating console at this time. Operators started the insertion of control rods to reduce power due to the vacuum problem.
2. At one point the insertion of control rods was made by the use of the Emergency In (Rod In) switch to reduce reactor power. The use of this switch did not meet the intent of Emergency In use and did result in the Rod Sequence Control System (RSCS) not being used to control rod movement by notch control below 20% of power as required.
3. When the operators reached groups of control rods that were of low rod worth (low effect on reactor power) in the rod insertion sequence, a shift technical advisor (STA) suggested that instead of manually inserting those control rods, that they could be scrambled (rapid insertion), resulting in a quicker insertion rate and reactor power level decrease. It was noted that the control rod scram time test panel was set up to do this as a part of normal startup testing requirements. While such action is allowed with the reactor at power, it is only allowed for one control rod to be scrambled, then returned to its original position before the next rod is tested.

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4. A collective discussion between the licensed operators in the control room resulted in a decision to proceed in that manner in order to prevent loss of the reactor feed pump. Vacuum at the time was approximately 1/2 inch above trip point. It was at this point control rod movement activities were prescribed to be completed in a manner contrary to procedures and requirements. Personnel involved failed to be aware that such control rod movement was not approved by existing procedures because the control rod that was scrammed was not to be returned to its original position before the next rod was scrammed. Involved personnel did not address the concern of conducting an operation outside of the bounds of analyzed conditions. Because of the failure to address such concerns, a possible "control rod drop accident" condition was not considered.
5. After the decision to scram control rods to effect rapid reactor power reduction was made, a plant operator continued to insert rods at the reactor panel while two additional operators proceeded to the scram timing panel with the rod sequence sheets to insert rods with the individual scram switches. When the front panel operator observed rods going in, he stopped inserting and verified further insertions from the scram panel. Personnel involved believed these actions complied with the two person verification requirements for rod movement with the RWM system bypassed.
6. After rod insertion in this manner, it was found that one rod was in an "out of sequence" position at notch 12. The vacuum pump was placed in service and vacuum stabilized at a low level. Because of the out of sequence condition, the reactor was manually scrammed (shutdown) as required by rod movement procedures.
7. Although their actions were incorrect, the involved plant operators actions were reasoned through and deliberate. During the critique the involved personnel became aware of the factors that had led them to incorrect conclusions.

It should be obvious from the above discussion that the operator actions were not performed to provide for the generation of electric power, because the turbine was already disconnected, but were done in the interest of reactor safety. The actions taken were intended to avoid or limit a transient on the reactor.

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C. Impact of Events

1. The intent of the operators to reduce reactor power for existing conditions was in itself proper, but the means of doing so were not within approved procedures or analysis.
2. The bypassing of the RWM and the assignment of a second operator to verify rod movement was in itself proper, but the failures to maintain this double verification and the movement of control rods from two different locations at the time of rod movement from the scram time test panel did not meet requirements.
3. The use of the scram time test panel to scram more than one control rod was improper and not within analyzed conditions as was the use of the emergency in switch, but had limited impact due to the low worth of the rods involved.
4. While not mitigating the seriousness of the events and the possible effects had other high worth rods been involved, the health and safety of the public were not affected by these events.

Corrective Steps Which Have Been Taken and Results Achieved: The following corrective actions were taken as the result of these events:

1. The Unit 2 reactor was placed in cold shutdown.

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2. Individuals involved with the event were removed from licensed duties [Operations Superintendent, Operations Supervisor on Shift (OSOS), Reactor Operator, Shift Technical Advisor (STA)]. Individuals were trained in the significance of the event and were allowed to assume licensed duties only after review by plant management.
3. Plant management conducted a session with Operations Supervisors to emphasize GPC's commitment to following procedures and to operation within analyzed regions. The role of the OSOS in management of the plant was clarified.
4. Results of the management investigation and proposed corrective actions were discussed with USNRC Region II personnel and their concurrence was obtained for Unit 2 restart.
5. Standing orders were issued for the control of the following activities:
 - A. Operation of emergency rod in switch. (This has since been placed in procedures HNP-1&2-9207.)
 - B. Rod worth minimizer bypass controls. (This has since been placed in procedures HNP-1&2-9207.)
 - C. Requirement for Plant Manager approval of SRO procedure changes. (This has since been placed in procedure HNP-9.)
6. Licensed operators and STA's were briefed on shift duties and detailed discussions were held in the following areas:
 - A. Description of the July 14 event;
 - B. Lessons learned from the event;
 - C. Operational philosophy;
 - D. Corrective actions to be taken for this event;
 - E. The need to avoid "consensus decisions".
7. Involved operating and STA personnel were counseled by GPC Power Generation Management.

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8. Supervisors and above viewed a GPC Power Generation presentation made by Mr. J. T. Beckham, Jr., Vice President and General Manager Nuclear Generation, on this event.
9. HNP-1&2-9207, Rod Movement Procedures, were revised to clarify the use of emergency rod in switch and bypassing of rod worth minimizer.
10. HNP-1&2-9402, Scram Time Testing Procedures, were reviewed in detail to assure they did not require revision.
11. Training was provided in the following areas:
 - A. A control room management course was presented to licensed operations supervisory personnel, SRO's, and selected Site Management personnel.
 - B. A special seminar and discussion of the NRC position regarding plant operations were presented by Mr. Paul Bemis of the USNRC. This presentation was presented to licensed personnel and other site personnel.
 - C. The manager of the Core Analysis section of Southern Company Services presented a lecture on Final Safety Analysis Report (FSAR) transient and accident analyses, procedure compliance, and the consequences of operations outside of analyzed areas. This was presented to licensed control room supervisors.
 - D. Site personnel were retrained in procedure compliance through the use of Departmental Directives.
 - E. GPC site personnel attended a taped lecture by H. C. Nix, Plant Hatch General Manager, on operating philosophy and procedure compliance.

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Corrective Steps Which Will Be Taken to Avoid Future Violations: In addition to steps already listed, the following ongoing actions have been taken:

1. Simulator training now stresses the lessons learned from this event.
2. Special "FSAR Analyzed Regions of Operation" topics are now being presented to licensed operators and STA's in training classes.
3. Training for STA's now stresses the role of the STA in the control room and Reactor Engineer duties for overview and standback approach.
4. The following training is planned to re-emphasize periodically the attitudes desired in the operation of the plant:
 - A. Long Term (Repetitive) Seminars - The Georgia Power philosophy of operation of Plant Hatch will be presented to licensed personnel and site management personnel who may be involved in decision making activities regarding the day-to-day operation of Plant Hatch. This will be done as a forum to provide for the free exchange of thoughts in the specific areas of: 1) why group decisions are not appropriate for operation; 2) system operation outside of the intent of existing procedures; 3) operation outside of procedures; and 4) lines of responsibility and authority in the control room during periods of non-routine operation. Other items which may be identified in the future can be added to assure that the desired operational philosophy is instilled in the appropriate personnel. This forum will be conducted on a schedule such that affected personnel are re-exposed to the desired attitudes on an annual basis.
 - B. Notable industry personnel will also be utilized in seminars on a long term basis.

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Office of Inspection and Enforcement
January 25, 1984
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- C. As part of the long term training the subject of plant operating philosophy will be in new employee training and annual retraining.
5. There are presently several activities performed by site management to monitor and evaluate shift activities on an on-going basis. The General Manager and Deputy General Manager, as well as the Operations Manager, make random audits of shift operations. This is complemented by the Duty Officer who generally observes night shift turnover activities and by management audits that require an assessment of backshift activities once per week. During outages, different members of management are assigned to the back shifts for audits and/or coordination functions. QA performs back shift audits periodically.

Date When Full Compliance Will Be Achieved: Compliance with requirements was achieved on July 14, 1983, with the conclusion of the Unit 2 reactor shutdown. By August 31, 1983, full compliance with long-term actions committed to in our July 18, 1983 response to this event was achieved.

Special Concerns: Those special concerns and questions expressed in the Proposed Imposition of Civil Penalties Notice have been addressed as follows:

1. Has the Georgia Power Company's (GPC) policy of "safety first" been compromised by improper plant "running" without proper consideration of overall plant safety? It has always been GPC's policy to operate and maintain the Plant Hatch reactors in a safe manner. While decisions made regarding the July 14, 1983, events were incorrect, they were never made with the intent, nor knowledge, to compromise safety. Those actions taken are isolated events and are contrary to the general operating policy of both GPC and its operators. To assure full understanding of the GPC policy, actions listed in the "Corrective Steps Which Have Been Taken" section of this response were completed. Additionally, site personnel were presented an August 22, 1983, memo from J.H. Miller, President, that defines the right, obligations and requirements with respect to providing for the safety of and standards of performance for all Plant Hatch personnel. Also, as a result of this event, QA has increased the frequency of their operations

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audits. The QA Department participates in a rotation program which currently includes a licensed (SRO) power generation engineer to better facilitate their audit process. Safety Review Board members are receiving additional classroom and simulator training in order to better assess the operation of the plant in their reviews and audits. These actions reflect GPC's and its operators' policy to always place safety first.

2. Has the GPC's policy of strict adherence to approved operating procedures been compromised at Plant Hatch by individual supervisors and managers and has an effective system of audits been implemented to assure compliance with policy? As stated, GPC believes that the actions carried out in the course of the July 14, 1983 events were taken with the mistaken belief that existing procedures allowed these actions. Managers, Superintendents and Supervisors have been reminded of the need to monitor plant activities and to assure procedure compliance. The existing procedure "Self Audit" program has been re-emphasized to all site departments to improve the quality of procedures. Procedure self-audits will assure that existing procedures are reviewed on a timely basis and should result in improved procedures.
3. Is each operations supervisor fully aware of his/her individual responsibilities for making decisions? The additional training steps, counseling and presentations discussed in the "Corrective Steps Which Have Been Taken" section of this response have assured that supervisors have been fully trained and understand their responsibilities.
4. Is the role and the authority of the shift technical advisor (STA) clear to them and to each operations supervisor? As part of an on-going program, training for STA's now stresses the role of the STA in the control room. STA's and operations supervisors understand the role and authority of STA's.

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5. Is each licensed operator aware of the importance of adherence to Technical Specifications and knowledgeable of approved interpretations of those specifications? Licensed personnel and STA's were provided a copy of the failure to follow Rod Movement Procedures as related to the July 14, 1983 event. This was presented in Departmental Directive 0-83-14. With the additional training completed to date, licensed operators are fully aware of the importance of complying with Technical Specifications and the GPC policy for such compliance and fully understand the intent and interpretation of these specifications.

Additional Improvements

In addition to our response in accordance with 10 CFR 2.201 and in addition to the Special Concerns expressed by the NRC in their Proposed Imposition of Civil Penalties Notice, GPC has made other general plant operations and management improvements since the July 14, 1983 event. Some of these are:

- A. A program to hold formal shift meetings at the start of each shift has been implemented. These meetings address concerns with the operation of the units and proposed actions to resolve problem areas.
- B. A new position of a supervisor whose function is to control maintenance activities during outages has been added to relieve the Shift Supervisors from the paper work duties of maintenance activities. This action allows full attention to be directed towards current unit operations.

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- C. An improved interface between departments has been achieved, resulting in better support of the Operations Department by other departments. This interface results in maintenance and engineering support being provided directly to Operations at the time of operational needs rather than an after the fact support. Further, it defines the responsibility of the Operations Supervisor and the support to be given him.
- D. The daily work schedule meeting has been moved to 8:30 a.m. rather than the 2:00 p.m. meeting time. This results in problems with unit operations being addressed in a more timely manner. Resolution of problems are proposed and carried out with the full support of all departments.
- E. Selected superintendents now attend the work schedule meetings. This results in more fully supervised problem resolutions.
- F. Department informational meetings are now held monthly. These meetings have improved communications between departments, resulting in more active involvement between the departments. Training efforts and operating philosophy are passed on to all levels of plant personnel. These actions have resulted in a better awareness by all personnel which leads to safe plant operations.
- G. Managers are becoming more involved in the day to day operations of the plant, resulting in better supervision of plant operations and activities.

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Georgia Power Company recognizes and concurs with the NRC's concerns as set forth in the Notice and in the enforcement conferences. We have responded and intend to continue to respond to this event in a manner which will ensure that safety will be the foremost concern of all involved with Plant Hatch. We believe the actions documented in this letter evidence such a prompt and extensive response. As previously noted, Georgia Power Company is enclosing payment of the proposed civil penalty. However, for the reasons previously given, and based on the actions presented herein, we respectfully request that NRC reconsider and reduce the civil penalty.

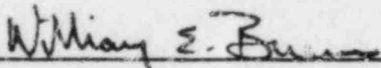
J. T. Beckham, Jr. states that he is Vice President of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company, and that to the best of his knowledge and belief the facts set forth in this letter are true.

GEORGIA POWER COMPANY

By: _____

J. T. Beckham, Jr.

Sworn to and subscribed before me this 25th day of January, 1984.



Notary Public Notary Public, Georgia, State at Large
My Commission Expires Aug. 26, 1985

DLT/mw

Enclosure

xc: H. C. Nix, Jr.
Senior Resident Inspector
J. P. O'Reilly, (NRC-Region II)



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

DEC 21 1983

Mississippi Power and Light Company
ATTN: Mr. J. B. Richard
Senior Vice President, Nuclear
P.O. Box 1640
Jackson, MS 39205

Gentlemen:

SUBJECT: PROPOSED IMPOSITION OF CIVIL PENALTIES: EA-83-133
FAILURE TO FOLLOW PROCEDURES
REFERENCE: INSPECTION REPORT NO. 50-416/83-43

A routine safety inspection was conducted by this office during the period August 21 - September 22, 1983 of activities authorized by NRC Operating License No. NPF-13 for the Grand Gulf facility. The inspection included a review of the circumstances surrounding the repairs performed on the Division 1 Diesel Generator after the fire which damaged the diesel on September 4, 1983. As a result of this inspection, examples of failures to comply with NRC regulatory requirements were identified. A meeting was held in the Region II office on October 4, 1983 at MP&L's request to discuss this matter. Mr. James P. O'Reilly, Regional Administrator, Region II, Mr. J. P. McGaughy, Vice President, Nuclear, MP&L, and members of their staffs participated in that meeting.

Item A in the Notice of Violation describes violations of approved plant procedures associated with the expedited repair of the Division 1 Diesel Generator after the fire of September 4, 1983. During this effort, the NRC Resident Inspector observed that procedures for proper tracking and control of maintenance performed on plant systems important to safety were not followed. In particular, a temporary alteration was made without performing an evaluation to ensure that it did not involve an unreviewed safety question.

The NRC is concerned that these violations involved key supervisory personnel and occurred after extensive retraining conducted by MP&L as part of the Operational Enhancement Program. We wish to note that MP&L stated in the meeting on October 4, 1983 that these events were caused by poor communication on the part of plant supervision and personnel error.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DEC 21 1983

Item A contains three examples of failure to meet NRC requirements and has been categorized as a Severity Level IV problem in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C. These violations are similar to other violations identified at Grand Gulf in the last two years involving failure to control temporary alterations and failure to follow procedures in conducting maintenance work. These recurrent violations were discussed at Enforcement Conferences on January 17 and April 20, 1983 in the Region II office during which each violation, its cause, and your corrective actions were reviewed. Based on these more recent examples, and your history of poor performance in control of temporary alterations to systems and equipment and failure to follow procedures, your implementation of corrective actions has not been sufficiently effective in preventing violations which stem from the same or similar causes. The Enforcement Policy states that a civil penalty may be imposed for Severity Level IV violations that are similar to violations discussed in a previous Enforcement Conference, and for which the Enforcement Conference was ineffective in achieving the required corrective action. These violations indicate weaknesses in evaluation and planning and in the implementation of procedures. To emphasize the importance that the NRC places on these matters, and to highlight the serious nature of these recurrent violations, I have been authorized, after consultation with the Director of the Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Twelve Thousand Dollars (\$12,000) for the violations described in Item A in the enclosed Notice.

The base civil penalty for a Severity Level IV problem is \$12,000. Consideration was given to the factors for mitigation of the base amount on Item A as allowed by the policy. However, since the violations were neither identified nor reported by MP&L, and because your immediate corrective actions were no more extensive than those which would have been expected, no mitigation of the proposed civil penalty is proposed.

Item B in the enclosed Notice has not been assessed a civil penalty because it was evaluated as a Severity Level IV violation but was not repetitive of previous violations.

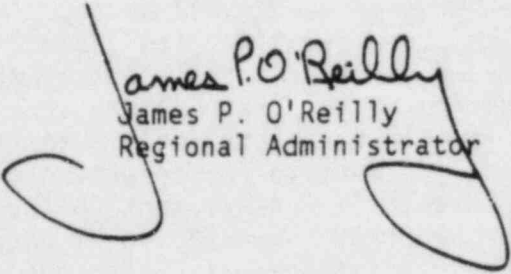
You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. Your response should specifically address the corrective actions taken or planned with regard to: (1) assuring all plant personnel, particularly at the supervisory level, adhere to the requirements of procedures; (2) assuring that temporary and other plant alterations receive the proper review and evaluation; and (3) enhancing communications related to safety matters. In your response, you may wish to refer to appropriate references in previous submittals to this office.

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 enclosure will be placed in the NRC's Public Document Room.

DEC 21 1983

The responses directed by this letter and accompanying 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 P. O'Reilly
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
Ralph T. Lally, Manager of Quality
Middle South Services, Inc.
C. K. McCoy, Plant Manager

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Mississippi Power and Light Company
Grand Gulf Nuclear Station Unit 1

Docket No. 50-416
License No. NPF-13
EA 83-133

An inspection conducted between August 21 and September 22, 1983 by the NRC Resident Inspector disclosed that certain maintenance activities performed as a result of a fire in the Division 1 Diesel Generator on September 4, 1983, were not conducted in accordance with approved procedures as described below.

On September 9, 1983 seven maintenance work orders (MWOs) relating to work on the Division 1 diesel generator (permanent plant safety-related equipment) were not properly authorized by operations personnel for the start of work as required by the relevant procedures. This procedural technique is used to assure that the plant operations department is cognizant of the status of equipment important to safe operation. In this case, because all seven of the MWOs related to work on the Division 1 Diesel Generator, the operations department was aware of the status of the diesel and no immediate threat to safe operation of the plant occurred.

On September 8, 1983 the existence of the improperly authorized MWO's was brought to the attention of the plant quality section by plant personnel who initiated a plant quality deficiency report (PQDR) and forwarded it to the plant quality superintendent. Rather than notifying responsible plant supervision to allow them to take corrective action as specified in plant procedures for processing PQDR's, a plant quality inspector was dispatched to initiate corrective action. As a result some, but not all, of the improperly authorized MWO's were corrected. These actions were not documented and the PQDR was not assigned a number nor was any further action taken on September 8, 1983. On September 9, 1983 after the NRC resident inspector became involved, another PQDR was initiated and properly processed.

On September 13, 1983, it was discovered that there was an unauthorized temporary alteration made to the Division 2 Diesel Generator. An air hose had been connected to the Division 1 Diesel Generator from the Division 2 air-start system and the associated isolation valve had been manipulated by unauthorized personnel. The Division 2 Diesel Generator was in standby status at the time as required by the Unit 1 Technical Specifications. The hose was connected without the knowledge or permission of the Operations Shift Superintendent and the valve was operated without his permission. The plant administrative procedures which were not followed in this case required both documentation of this temporary alteration and mandated a plant review for determination of an unresolved safety question. Subsequent to discovery of the condition, an evaluation was performed which indicated that operability of the required diesel generator had not been affected by the alteration.

However, these violations are of concern to the NRC because of their recurrent nature. Previous violations of this type had been brought to the attention of Mississippi Power and Light Company in Enforcement Conferences held on January 17 and April 20, 1983. The corrective actions taken for these prior violations were ineffective in the prevention of the current violations.

In accordance with the NRC Enforcement Policy, 10 CFR 2, Appendix C, 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, the particular violations and associated civil penalty are set forth below:

Violations Assessed A Civil Penalty:

A. Technical Specification 6.8.1 requires written instructions be established, implemented, and maintained in accordance with the applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.

1. Administrative Procedure 01-S-06-3, Revision 11, "Control of Temporary Alterations", requires that temporary alterations be documented and authorized and that changes to the plant as described in the Final Safety Analysis Report (FSAR) be evaluated for an unreviewed safety question.

Contrary to the above, on September 13, 1983 an air hose was connected to the Division 2 Diesel Air Start System without the required authorization at a time when the diesel was required to be operable by Technical Specifications. This temporary alteration was made without knowledge or approval of the operations department and no evaluation was made prior to the alteration to determine that it did not involve an unreviewed safety question.

2. Administrative Procedure 01-S-07-1, Revision 9, "Control of Work on Plant Equipment and Facilities", requires that before work begins on permanent plant safety equipment such as standby diesel generators, an authorization for the work be obtained from the operations department.

Contrary to the above, on September 9, 1983 work had commenced or had been completed on seven maintenance work orders associated with the Division 1 Diesel Generator without authorization from the plant operations department.

3. Administrative Procedure 01-S-03-2, Revision 8, "Plant Quality Deficiency Reports", Paragraph 6.4, requires the responsible section or organization to disposition plant quality deficiency reports.

Contrary to the above, on September 8, 1983 plant quality representatives took an active role in correcting the failure to obtain authorization of maintenance work requests identified in Item A.2, above, rather than ensuring that the responsible parties took action as required.

Collectively, the above violations have been evaluated as a Severity Level IV problem.
(Cummulative Civil Penalty - \$12,000)

Violation Not Assessed A Civil Penalty:

- B. 10 CFR 50, Appendix B, Criterion V, as implemented by MP&L Topical-1A, Policy 5, Deficiencies, requires activities affecting quality to be prescribed by documented instructions or procedures of a type appropriate to the circumstances.

MP&L Topical-1A, Policy 2, requires implementation of regulatory requirements be accomplished by use of the verb "shall" in the implementing procedure.

Contrary to the above, certain administrative procedures, established in accordance with the requirements of Technical Specification 6.8, did not explicitly state that the "recommendations" contained in referenced documents were in fact adopted by MP&L as "requirements," in that requirements were not implemented in the procedure by use of the word "shall." These procedures were Administrative Procedures 02-5-01-09, 09-5-07-9, 01-5-03-2, 01-5-03-3, and 01-5-01-26.

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

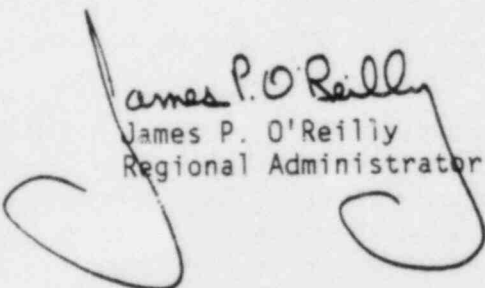
No response is required for Item B, above, because the corrective action to be taken by MP&L for this Item was discussed and agreed to by MP&L in a management meeting conducted in the Region II office on October 4, 1983. Documentation of that corrective action is provided in Region II Inspection Report No. 50-416/83-43, Paragraph 7.

Pursuant to the provision of 10 CFR 2.201, Mississippi Power and Light Company is hereby required to submit to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II, within 30 days of the date of this Notice a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violations; (2) the reasons 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. 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, the response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Mississippi Power and Light Company may pay the civil penalty in the amount of Twelve Thousand Dollars (\$12,000) or may protest imposition of the civil penalty in whole or in part by a written answer. Should Mississippi Power and Light Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties in the amount proposed above. Should Mississippi Power and Light Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer may: (1) deny the violation presented 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 IV(B) of 10 CFR Part 2, Appendix C 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 by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Mississippi Power and Light Company's attention 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. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION


James P. O'Reilly
Regional Administrator

Dated at Atlanta, Georgia
this 21 day of December 1983



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

NUCLEAR PRODUCTION DEPARTMENT

January 26, 1984

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

Attention: Mr. R. C. DeYoung, Director

Dear Mr. DeYoung,

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-13
File: 0260/15525/15526
I.E. Report 50-416/83-43 of
August 21 - September 22,
1983 and 50-416/83-56 of
November 10 - December 13, 1983
AECM-84/0062

Reference: MAEC-83/0402, December 21, 1983
MAEC-84/0005, January 9, 1984

This letter provides our response to Notices of Violation 83-43-01, 02, and 03. The extension of the date for this response was discussed with Mr. Caudle Julian and Mr. Dave Verrelli of the NRC Region II office.

The Proposed Imposition of Civil Penalty (EA-83-133) has been reviewed and MP&L has decided to pay the penalty. Payment of the proposed penalty is included with this transmittal.

The request of January 9, 1983 to incorporate the responses to IR 83-56 into this document was received only fifteen days ago. Those responses (83-56-01,02,03,04) are being developed and will be forwarded as a supplement to this document per discussion of January 24, 1983 with Mr. Dave Verrelli of Region II.

Yours truly,

L. F. Dale
Manager of Nuclear Services

PRH:scb

Member Middle South Utilities System

I.A-73

VIOLATION
50-416/ 83-43-01

I. ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Mississippi Power & Light admits to the alleged violation.

II. THE REASONS FOR THE VIOLATION IF ADMITTED

On Sept. 12, 1983, Mechanical Maintenance attempted to jack the Division I Diesel Generator (DG) crankshaft over 180 degrees for generator inspection utilizing a permanently installed cylinder and piston device and powering it by plant air. The force from the jack utilizing plant air at approximately 100 PSIG was insufficient to move the shaft. While trying to determine how to jack this DG shaft over, the Mechanical Superintendent recalled that the DG starting air pressure was considerably higher than plant air pressure so he thought he might be able to use it instead of plant air. Division II DG starting air was in service.

The Mechanical Superintendent requested the Nuclear Support Manager, who was in the area at the time and was going to the Shift Superintendent's Office on another matter, to check with the Shift Superintendent on the use of Division II DG starting air to jack the Division I DG over for inspection.

The Nuclear Support Manager considered the inquiry not to be a direct request, but more of a casual questioning from the Mechanical Superintendent. The Nuclear Support Manager then told the Mechanical Superintendent he would mention to the Shift Superintendent that the Mechanical Superintendent would be asking about the service air use.

The Nuclear Support Manager asked the Shift Superintendent if he would allow the use of Division II DG starting air to jack the Division I DG over and the Shift Superintendent refused. The Nuclear Support Manager did not take his inquiry to be anything more than informal and thought that the Mechanical Superintendent would be asking for himself when he was ready. He therefore, did not give the Mechanical Superintendent any feedback.

The Mechanical Superintendent then directed the Mechanical Supervisor to make ready the connections and went to his office.

The Mechanical Supervisor, following the Mechanical Superintendent's directions, made ready and hooked up the hose to a Division II DG starting air receiver connection and used Division II DG starting air to jack Division I DG crankshaft approximately 180 degrees.

CONCLUSIONS:

- ° An administrative control system breakdown occurred.
- ° The breakdown resulted from intensive schedule pressure, poor communications, and lack of regard for or attention to procedures by certain personnel.

III. CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

On September 13, 1983, the Operations Shift Superintendent was informed of the temporary connection that was made without proper reviews, authorizations, and documentation from the Division II DG starting air system to the Division I DG barring device. The Shift Superintendent immediately directed Maintenance to remove the connection and issued Plant Quality Deficiency Report No. 099-83.

The connection was removed, the Mechanical Superintendent and Supervisor were counseled, and the PQDR dispositioned.

IV. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATION

MP&L executive management verbally reiterated the seriousness of failing to follow procedures to Plant Management.

The Mechanical Superintendent was given a written reprimand for his actions contributing directly to the procedure breakdown.

Line managers and superintendents were verbally instructed to give prompt feedback on important information and to avoid giving the impression of sanctioning or condoning unauthorized actions to expedite work accomplishments.

The Mechanical Superintendent and Mechanical Supervisor involved in the incident have been counseled and are aware of the proper procedures for performing temporary alterations. A memo was issued to plant personnel emphasizing the importance of following the "Temp Alt" procedure.

V. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

MP&L has achieved full compliance.

VIOLATION
50-416/ 83-43-02

I. ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Mississippi Power & Light admits to the alleged violation.

II. THE REASONS FOR THE VIOLATION IF ADMITTED

After the fire on Sept. 4, 1983, no physical work was performed on the Diesel Generator (DG) that could have destroyed evidence; therefore invalidating warranty and/or insurance claims. Following the initial inspection by the Delaval and the insurance company representatives, the DG was released for work on Sept. 6, 1983.

Due to the scope of the restoration work included and the time involved to process the necessary work documents, very little physical work was in progress. Upon the Plant Manager's tour of the damaged area, concerns were then generated about what impact this lack of physical work would have on the extremely urgent restoration schedule. This concern was then expressed to his subordinates. To resolve the above concerns, the Maintenance Superintendent and the Mechanical Superintendent discussed ways to speed up the paperwork which was causing delays in starting some of the physical work. One of the ways discussed was the possibility of changing the Releasing Organization from Operations to Maintenance for the work activities in the Division I DG isolated block of work for the fire restoration action.

The Maintenance Superintendent then asked the Operations Superintendent if the change in the Releasing Organization could be done. The operations Superintendent replied that it could not be done citing both the Administrative Procedure and FSAR. The Maintenance Superintendent then failed to get this word back to the Mechanical Superintendent.

Later in the day the Mechanical Supervisor, serving as an assistant to the Mechanical Superintendent, understood it to be all right for Maintenance to be the Releasing Organization for those MWO's in the Division I DG isolated area through discussions with the Maintenance Superintendent. This mechanical supervisor then discussed the Releasing Organization change with Maintenance Planners and a Maintenance Engineer. They then changed the Releasing Organization from Operations to Maintenance on several MWO's.

CONCLUSION:

- ° An administrative control system breakdown occurred
- ° The breakdown resulted from intensive schedule pressure, poor communications, and lack of regard for or attention to procedures by certain personnel.

III. THE CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

On Sept. 8, 1983 the Releasing Organization problem was brought to the attention of a Plant Quality Representative by two Supervisory level persons (one from Maintenance and one from Operations). The Maintenance Representative gave Plant Quality a PQDR form (see response 83-43-03) identifying seven mechanical MWO's known to have the incorrect Releasing Organization.

A total of twelve mechanical MWO's were discovered to have the incorrect Releasing Organization signature.

Of the twelve:

- ° Five were corrected on Sept. 8, 1983
- ° Two were corrected on Sept. 8, 1983
- ° Four were corrected on Sept. 9, 1983
- ° One was corrected on Jan. 23, 1984

IV. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

The Administrative Procedure controlling release to work was revised to clarify what specific equipment can be released by organizations other than operations.

A memo was written to the Mechanical Superintendent and the Mechanical Supervisor assisting them on the proper actions of identifying who is responsible for releasing equipment to the plant. A memo was issued to plant personnel emphasizing the importance of following the "Control of Work" procedure.

V. THE DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

MP&L has achieved full compliance.

VIOLATION
50-416/83-43-03

I. ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Mississippi Power and Light Company (MP&L) admits to the alleged violation. Even though MP&L admits to the violation, there were no adverse affects on the health and safety of the public.

II. REASON FOR THE VIOLATION

The PQDR was brought to the attention of the Plant Quality Section on September 8, 1983. An inspector was dispatched to the field not with the intent to correct the deficiencies, but to determine the extent of the identified deficiencies. This research was necessary to determine if immediate corrective action or interim controls were required.

When the inspector reached the diesel bay area, he discovered immediate corrective action already in process by Maintenance & Maintenance Engineering. A review was being performed to determine which MWO's had the incorrect releasing organization. As these MWO's were found they were returned to the Operations Department for the correct release. The Plant Quality inspector aided in the review not with the intent of providing the corrective action, but under the impression that he was determining the extent of the problem and verifying that the immediate action taken by Engineering and Maintenance had in fact corrected all the nonconforming MWO's. Any MWO's discovered during his review were identified to Maintenance and Maintenance Engineering for corrective action.

The PQDR was not immediately assigned a number and processed to the responsible organization for the following reasons:

- (1) Plant Management, in an effort to establish more timely responses to PQDR's, had suggested that Plant Quality hold meetings between the responsible organizations to discuss the extent of the nonconformance, corrective action and remedial corrective action.
- (2) The PQDR procedure did not specify when a number must be assigned to the PQDR. At the time of the alleged violation numbers were routinely assigned after the deficiency meeting with the responsible section.
- (3) The PQDR procedure did not specify that immediate corrective actions must be documented on the PQDR.
- (4) Plant Quality believed the immediate corrective action had corrected all active MWO's.

III. CORRECTIVE ACTIONS TAKEN AND THE RESULTS ACHIEVED

PQDR 097-83 was issued on September 9, 1983, to responsible supervision.

Plant Quality performed a review of 140 MWOs associated with the diesel rework. Listed below are the results of that review:

- (1) One hundred twenty-eight MWOs were found to have the proper releasing organization.
- (2) Twelve MWOs were found not to have the proper releasing organization.
 - (A) Of these twelve, five were found to be corrected on Sept. 9, 1983.

M39294	M39329
M39295	M39330
M39302	

- (B) Two were corrected on Sept. 7, 1983 before the problem was documented on the PQDR.

M39296	M39297
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- (C) Four were found to be completed on Sept. 8, 1983 prior to problem identification. These were corrected on Sept. 9, 1983.

M39289	M39291
M39290	M39293

- (D) MWO M39292 was thought to have been properly corrected, but the signature was later determined to be that of a Maintenance Supervisor. This MWO was reviewed after the fact by Operations and corrected.

IV. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATION

Administrative Procedure 01-S-03-2, "Plant Quality Deficiency Report", will be revised to reflect the following:

- (1) Upon receipt of a PQDR by Plant Quality, a sequential number will be assigned and logged by Plant Quality.
- (2) Any immediate corrective actions taken will be documented on the PQDR.

V. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance will be achieved by February 7, 1984.



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

SEP 29 1983

Docket No. 50-344
EA 83-85

Portland General Electric Company
121 S. W. Salmon Street
Portland, Oregon 97204

Attention: Mr. Bart D. Withers
Vice President, Nuclear

Gentlemen:

Reference: NRC Inspection Report No. 50-344/83-18

A special inspection was conducted by this office on June 20-24, 1983 and July 26-28, 1983 of activities authorized by NRC Operating License No. NPF-1. A report of the results of the inspection, No. 50-344/83-18 was forwarded to you on August 31, 1983. The inspection consisted of an examination of steps taken by you to assure compliance with 10 CFR 50.48 and, in particular, Sections III.G, J, and O of Appendix R to 10 CFR Part 50 relating to fire protection. The results of this inspection were discussed on September 9, 1983, during an enforcement conference held at the NRC Region V offices between Mr. Bart D. Withers and other members of your staff and Mr. John B. Martin and other members of the NRC staff.

The results of the inspection revealed several violations of NRC fire protection requirements. These violations appear to have been the result of an inadequate reassessment of the fire protection features at the Trojan Nuclear Power Plant. NRC generic letter 82-12 dated February 20, 1981 specifically emphasized the need for you to reassess fire protection features at your facility to assure compliance with the new NRC requirements in this area.

These violations and the surrounding circumstances were discussed during the enforcement conference. Your past efforts to upgrade fire protection features were also discussed. However, as pointed out at the conference, NRC notified you specifically in 1981 that you were expected to reassess the fire protection features at the Trojan Nuclear Plant to ensure that conditions satisfied the new requirements prescribed in Sections III.G, J, and O of Appendix R, 10 CFR Part 50. The inspection demonstrated that you failed to comply with the new Appendix R requirements. As further discussed in the conference, the underlying cause of this failure was inadequate control of engineering activities, including: (1) an inadequate reassessment of plant conditions regarding the applicable Appendix R requirements, (2) lack of documentation of reassessments and reviews, and (3) lack of supervisory reviews to assure technical adequacy and accuracy of the reassessments. This reflects a significant breakdown in the administrative controls used to ensure compliance with fire protection requirements. We are confident that, had your engineering activities related to the necessary reassessment been of the

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RETURN RECEIPT REQUESTED

SEP 29 1983

quality expected of NRC licensees, any confusion as to what the new rule required would have been detected and promptly resolved.

Your efforts to improve fire protection features at Trojan prior to the new NRC requirements were considered. Nonetheless, your failure to recognize the need for a formal reassessment of the fire protection features at the Trojan facility after the new NRC requirements became effective indicates a serious breakdown in your efforts at ensuring compliance with NRC requirements.

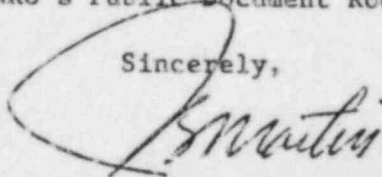
In order to emphasize the importance NRC places on compliance with the fire protection requirements and the need for licensees to maintain proper control over all aspects of safety-related activities including engineering evaluations, I have been authorized, after consultation with the Director of the Office of Inspection and Enforcement, 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 set forth in the enclosed Notice. These violations have been categorized as a Severity Level III problem in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C. A civil penalty of \$100,000 is being proposed because of the significance of the administrative breakdown discussed above.

You are required to respond to the enclosed Notice and, in preparing your response, you should follow the instructions specified in the Notice. Your response should address the corrective actions taken or planned including those actions necessary to reassess fire protection features at the Trojan facility. Your written reply to this letter and Notice will be the basis for determining whether additional enforcement actions are warranted.

The responses directed by this letter and the accompanying 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.

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 enclosure will be placed in the NRC's Public Document Room.

Sincerely,



John B. Martin
Regional Administrator

Enclosure:
Notice of Violation and Imposition
of Civil Penalty

cc's:
C. P. Yundt, PGE
J. W. Durham, Esq., PGE

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Portland General Electric Company
Trojan Nuclear Facility

Docket No. 50-344
License No. NPF-1
EA 83-85

On February 17, 1981, the NRC revised its regulations to upgrade fire protection at nuclear power plants (45 FR 76611, November 19, 1980). Based upon the revised fire protection regulations, Portland General Electric Company was required to reexamine the fire protection configuration at the Trojan Nuclear Facility to determine whether or not the facility satisfied the requirements of 10 CFR 50.48. Previously approved configurations were to be reanalyzed to determine if the new fire protection requirements were satisfied or if alternatives were justified based upon a fire hazards analysis. The special fire protection inspection conducted at the Trojan Nuclear Power Plant during the period of June 20-24, and July 26-28, 1983 identified several violations of these new requirements. A review of your actions concerning this matter revealed that your reanalysis was inadequate and did not ensure that the revised fire protection requirements were properly satisfied.

To emphasize the importance the NRC places on compliance with the fire protection requirements and the need for licensees to maintain proper control over all aspects of safety-related activities including engineering evaluations, the Nuclear Regulatory Commission proposes to impose a civil penalty in the amount of \$100,000. In accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C) and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL-96-295 and 10 CFR 2.205, the particular violations and the associated civil penalty are set forth below:

Violations Assessed A Civil Penalty

10 CFR 50.48(b) in part requires that all nuclear power plants licensed to operate prior to January 1, 1979, shall satisfy the applicable requirements of Appendix R to this part, including, specifically, the requirements of Sections III.G, Fire Protection of Safe Shutdown Capability, III.J, Emergency Lighting, and III.O, Oil Collection System for Reactor Coolant Pump.

- A. 10 CFR 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 station(s) is free of fire damage.

Sections III.G.2 and III.G.3 specify four alternatives that may be implemented outside of primary containment to assure that one redundant train of equipment, cabling and associated circuits necessary to achieve and maintain hot shutdown remains free of fire damage. The alternatives are:

1. Separation of redundant trains of equipment, cabling and associated circuits by a three-hour rated fire barrier.

2. Enclosure of redundant trains of equipment, cabling and associated circuits by a one-hour rated fire barrier with fire detection and automatic fire suppression systems installed in the area.
3. Separation of redundant trains of equipment, cabling and associated circuits by a horizontal distance of 20 feet with no intervening combustibles and fire detection and automatic fire suppression systems installed in the area.
4. Installation of alternative or dedicated shutdown capability independent of the equipment, cabling and associated circuits under consideration, and installation of fire detection and fixed fire suppression systems in the area under consideration.

Contrary to the above requirements, at the time of the inspection, fire protection features were not provided for certain redundant trains of equipment and/or cabling necessary to achieve and maintain hot shutdown conditions such that one train would remain free of fire damage. Specifically, regarding the centrifugal charging pumps and associated coolers, none of the alternatives provided by Section III.G.2 and III.G.3 were implemented, and Section III.G.1.a was violated. The two reactor coolant system centrifugal charging pumps and associated coolers necessary to achieve and maintain hot shutdown would not remain free of fire damage in the event of a fire in either of the pump rooms or the adjacent access area. The wall separating the pump rooms had open penetrations and the power supply cables were not protected to preclude loss of both trains of equipment.

- B. 10 CFR 50, Appendix R, Section III.G.1.b, requires that systems necessary to achieve and maintain cold shutdown from the control room or emergency control station(s) can be repaired within 72 hours.

Contrary to the above, at the time of the inspection, the redundant trains of equipment and cabling necessary to achieve cold shutdown conditions were not capable of being repaired within 72 hours as demonstrated by the absence of planning, procedures, and/or materials necessary to implement fire damage repairs. Further, these systems were not sufficiently protected to survive the effects of a single fire as described below:

1. The two residual heat removal (RHR) pumps were located in separate rooms in the auxiliary building at the 5 foot elevation. The wall separating the pumps and other enclosing walls had open penetrations. Also, the access doors to the rooms were constructed with nonclosing ventilation louvers. Transient combustibles consisting of anti-C clothing, paper, tape, etc. were stored on open shelves in the access area outside the RHR rooms. Also, the RHR pump power cables were not protected to preclude the loss of both trains of equipment from a fire in either of the pump rooms or the adjacent access area.

2. The boric acid transfer pumps, Trains A and B, were located on the 65 foot elevation in the fuel building. The pumps were in a common area, within approximately 12 feet of each other, and were not protected by an automatic fire suppression system. The pump power cables were also located in the common area and not protected to preclude the loss of both pumps due to a fire in the area.
- C. 10 CFR 50, Appendix R, Section III.G.2 requires that inside non-inerted containments one of six (a through f) fire protection means shall be provided such as: separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards; or installation of fire detectors and an automatic fire suppression system in the fire area; or separation of cables and equipment and associated non-safety circuits of redundant trains by a noncombustible radiant energy shield.

Contrary to the above, at the time of inspection, the cabling for both safe shutdown trains and associated non-safety circuits were not adequately separated and intervening combustibles (other electrical cable) bypassed the installed radiant energy shields at the electrical penetration area inside containment. No automatic fire suppression system had been installed in this area of containment.

- D. Section III.G.3 requires that alternate or dedicated shutdown capability and its associated circuits in the area, room or zone under consideration, shall be provided where the protection of systems whose function is required for hot shutdown does not satisfy the requirements of Section III G.2.

Section III.L.2 requires that process monitoring function for alternative or dedicated shutdown capability shall be capable of providing direct readings of reactivity and reactor coolant system heat removal functions.

Contrary to the above, for the control room and cable spreading room, the licensee elected to provide alternate shutdown capability in accordance with Section III.G.3 but, at the time of the inspection, alternative or dedicated shutdown system process monitoring instrumentation was not installed outside the control room and the cable spreading room to provide direct reading for source range neutron flux or the hot and cold leg reactor coolant system temperatures.

- E. 10 CFR 50, Appendix R, Section III.O. requires that the reactor coolant pump shall be equipped with an oil collection system. Leakage shall be collected and drained to a vented closed container that can hold the entire lube oil system inventory.

Contrary to the above, at the time of the inspection, two oil collection tanks had been installed, each with a capacity of 306 gallons. Each tank collects oil leakage from two reactor coolant pumps. A reactor coolant pump lube oil system contains approximately 265 gallons of oil. Therefore, the potential lube oil leakage of two pumps into a tank exceeds collection capacity by approximately 224 gallons.

Collectively, the above violations have been evaluated 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, Portland General Electric Company Corporation is hereby required to submit to the Director, Office of Inspection and Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555 and a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region V, within 30 days of the date of this Notice, a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons 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; (5) the date when full compliance will be achieved. 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, Portland General Electric Company may pay the civil penalty in the amount of \$100,000 or may protest imposition of the civil penalty, in whole or in part, by a written answer. Should Portland General Electric Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement will issue an order imposing the civil penalty proposed above. Should Portland General Electric Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty such answer 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 contained in Section IV(B) of 10 CFR Part 2, Appendix C 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 statements or explanations by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Portland General Electric Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedures for imposing a civil penalty.

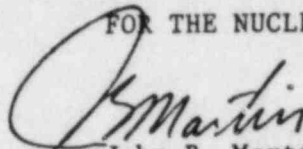
Upon failure to pay any civil penalty due, which has been subsequently determined in accordance with the applicable provisions of 10 CFR 2.205, this

Notice of Violation

-5-

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. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION



John B. Martin
Regional Administrator

Dated at Walnut Creek, California
this *9* day of September 1983

Bert D Withers Vice President

October 28, 1983

Trojan Nuclear Plant
Docket 50-344
License NPF-1

Director, Office of Inspection
and Enforcement
U.S. Nuclear Regulatory Commission
Washington DC 20555

Dear Sir:

TROJAN NUCLEAR PLANT
Response to Notice of Violation and
Proposed Imposition of Civil Penalty

By NRC letter of September 29, 1983 from Mr. John B. Martin, Portland General Electric Company received a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000. We have reviewed that letter and the circumstances surrounding the occurrence described in the Notice of Violation and Proposed Imposition of Civil Penalty and disagree with the categorization of the violations. We protest the amount of the proposed civil penalty in entirety and request remission or substantial mitigation. We have provided the attached responses in accordance with the instructions provided.

Attachment 1 is our response to the Notice of Violation in accordance with the provisions of 10 CFR 2.201. Attachment 2 is our response to the Proposed Imposition of Civil Penalty requesting remission or mitigation of the proposed civil penalty in accordance with Appendix C of 10 CFR 2 and Section 2.203.

In general, the proposed civil penalty is unwarranted and arbitrary. As described in Attachment 1, none of the alleged violations involve a direct noncompliance with any particular provision of applicable law or NRC rule, regulation, license, or order. None of the alleged violations of 10 CFR 50, Appendix R are specifically referenced to the severity level definitions of Appendix C to 10 CFR 2, General Policy and Procedure for NRC Enforcement Actions, nor is the amount of the civil penalty referenced to

Portland General Electric Company

Director, Office of Inspection
and Enforcement
October 28, 1983
Page two

the specific base civil penalties or adjustment factors given in Appendix C. This has complicated our understanding of the proposed civil penalty and the preparation of this response.

Portland General Electric Company has made every effort to comply with the NRC's fire protection requirements. Trojan was one of the first operating plants to comply with pre-Appendix R requirements. We were also one of the first plants to be inspected under the new Appendix R, based on our honest belief that we complied with Appendix R. We are now the first plant to be penalized, in spite of our past efforts and timely actions to comply with fire protection requirements. This is particularly painful since other NRC fire inspections which yielded similar findings at other plants are still unresolved, and a large number of such inspections have not yet been conducted.

At the time of the NRC inspection, we were surprised to find that we were being audited to a number of NRC clarification memoranda that had never been formally transmitted to licensees. The audit team was not only able to evaluate and assess compliance, but they were given the freedom to interpret the rules and requirements as well. 10 CFR 50, Section 50.48, and Appendix R are ambiguous and difficult to interpret, as evidenced by the several internal NRC-clarifying memoranda that were not provided to PGE in timely advance of the special fire protection inspection. These internal memoranda, in essence, created additional requirements, unknown to PGE, outside of the normal NRC process for clarification of regulations. These NRC clarifications, in part, were finally transmitted to PGE and other licensees by Generic Letter 83-33 one week ago on October 19, 1983, because of widespread misinterpretations by many utilities.

The NRC's inconsistent approach to imposition of fire protection regulations is unparalleled. First, a licensee was required to spend millions of dollars (\$7 million for Trojan) to comply with Branch Technical Position 9.5.1, culminating in NRC approval in the form of Safety Evaluation Reports and Technical Specifications for such compliance. The licensee was then subsequently required to reassess that compliance with a new rule. The need to ask for specific exemptions after the NRC had previously approved Plant configurations created an unnecessary amount of redundant paperwork and administrative effort when it was already determined that the Plant was safe.

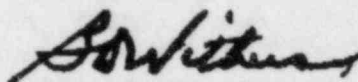
In conclusion, we plan to make improvements in the Plant and in procedures to meet the clarifying criteria of the internal NRC memoranda. However, PGE would like to emphasize, although not specifically addressed in your September 29, 1983 letter, that at all times the Trojan Nuclear Plant had an adequate fire protection program, and the Plant was never unsafe because of fire protection deficiencies.

Portland General Electric Company

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and Enforcement
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Page three

Copies of our previous responses to the NRC on the special fire protection inspection, dated July 8, July 15, and September 28, 1983, are enclosed since they are referenced herein.

Sincerely,



Bart D. Withers
Vice President
Nuclear

Attachments
Enclosures (3)

c: Mr. John B. Martin
Regional Administrator, Region V
U. S. Nuclear Regulatory
Commission

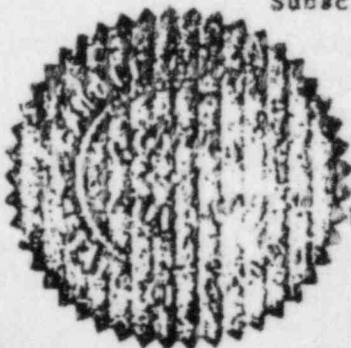
Mr. Lynn Frank, Director
State of Oregon
Department of Energy

Subscribed and sworn to before me this 28th day of October 1983.


Notary Public of Oregon

My Commission Expires:

August 9, 1987



10 CFR 2.201
RESPONSE TO NOTICE OF VIOLATION

Portland General Electric Company (PGE) provides the following responses to those alleged violations assessed a civil penalty forwarded by John B. Martin's letter to Bart D. Withers dated September 29, 1983.

It is important that this response not be viewed as inconsistent with our partial response to administrative concerns that was provided on September 28, 1983 (B. D. Withers to J. B. Martin letter). While our previous response agreed that NRC's administrative concerns were valid, and while we continue to take corrective actions based on these concerns, we do not believe that these concerns are violations which warrant a civil penalty.

NRC Finding A

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

Sections III.G.2 and III.G.3 specify four alternatives that may be implemented outside of primary Containment to assure that one redundant train of equipment, cabling, and associated circuits necessary to achieve and maintain hot shutdown remains free of damage. The alternatives are:

1. Separation of redundant trains of equipment, cabling, and associated circuits by a 3-hr rated fire barrier.
2. Enclosure of redundant trains of equipment, cabling, and associated circuits by a 1-hr rated fire barrier with fire detection and automatic fire suppression systems installed in the area.
3. Separation of redundant trains of equipment, cabling, and associated circuits by a horizontal distance of 20 ft with no intervening combustibles and fire detection and automatic fire suppression systems installed in the area.
4. Installation of alternative or dedicated shutdown capability independent of the equipment, cabling, and associated circuits under consideration, and installation of fire detection and fixed fire suppression systems in the area under consideration.

Contrary to the above requirements at the time of the inspection, fire protection features were not provided for certain redundant trains of equipment and/or cabling necessary to achieve and maintain hot shutdown conditions such that one train would remain free of fire damage, specifically regarding the centrifugal charging pumps (CCPs) and associated coolers.

None of the alternatives provided by Sections III.G.2 and III.G.3 were implemented, and Section III.G.1.a was violated. Two Reactor Coolant System CCPs and associated coolers necessary to achieve and maintain hot shutdown would not remain free of fire damage in the event of a fire in either of the pump rooms or the adjacent access area. The wall separating the pump rooms has open penetrations, and the power supply cables were not protected to preclude loss of both trains of equipment.

PGE Response

PGE denies that this item is a violation of Sections III.G.1, III.G.2, or III.G.3.

With regard to Section III.G.1, PGE maintains that adequate fire protection features were provided for redundant trains of equipment and/or cabling necessary to achieve and maintain hot shutdown conditions such that one train would remain free of fire damage. Each CCP is located in a separate room, separated by a 13-in.-thick wall, and are 12 ft apart. The fire loading of combustibles in either room, described in the PGE to NRC letter dated July 8, 1983 (Bart D. Withers to John B. Martin) and PGE-1012, are such that a fire in one CCP room would not spread to the other CCP room, nor would the cables in the passageway outside be expected to be damaged. Although a pipe chase and penetrations between the two rooms exist, neither would cause a fire in one CCP room to spread to the adjacent room. The maximum result effected from any fire would be the loss of one safety train. The other redundant train, equipment, and cables would not be involved because of the physical separation provided. Furthermore, loss of one or more CCPs could be compensated for by use of either of two safety injection pumps or a positive displacement charging pump, which could not be realistically expected to fail as a result of a fire in one of the CCP rooms.

With regard to Section III.G.2, this section applies to redundant trains of systems that are located within the same fire area. This item is not considered a violation by PGE, but is considered one by the NRC because of a clarified definition of "fire areas", as used in Appendix R, that was provided in an internal NRC memorandum. In Typical Report PGE-1012, "Trojan Nuclear Plant Fire Protection Program", fire areas were defined as a fire zone or an area containing combustibles bounded by either physical barriers such as walls, doors or dikes, or spatial separation, which tended to isolate one area from another. The affected area was originally selected on the basis of engineering judgment and then

Trojan Nuclear Plant
Docket 50-344
License NPP-1

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and Enforcement
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Attachment 1
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analyzed to justify its selected boundary. If the boundary could not be realistically justified, the affected area was expanded to barriers that could withstand the maximum calculated fire and realistically be justified. Inasmuch as this document had been reviewed and approved by the NRC, and PGE had received Safety Evaluation Reports (SERs) on this document, there was no reason to believe that the definitions of fire areas were inappropriate. Issuance of the final NRC rule on fire protection (10 CFR 50.48 and Appendix B) did not provide a new definition or even indicate that previous definitions of fire areas were unacceptable. Only an internal NRC clarifying memorandum used by the NRC inspection team indicated that our previously accepted definition of fire areas was unacceptable.

With regard to Section III.G.3, this section was not applicable since we concluded that we complied with Section III.G.2.

Nevertheless, immediate compensatory actions and modifications and long-term corrective action by PGE were outlined in PGE to NRC letters dated July 8, 1983 (D. J. Broehl to J. B. Martin) and September 28, 1983 (B. D. Withers to J. B. Martin). The immediate corrective steps consisted of sealing all pipe penetrations in the walls between redundant CCP rooms with 3-hr seals, sealing the opening above the B Train CCP room door with a marinite board of 1-hr equivalent fire rating, providing the HAV duct penetration between the CCP rooms with a 3-hr rated fire damper, and installing hatch covers on the hoistway openings in the Auxiliary Building at Elevations 25, 45, 61, and 77 ft (these hatch covers have a fire-protective coating applied to the top and bottom surfaces). Additionally, 2-hr fire watch patrols of the Auxiliary Building, with hourly patrols of Elevations 5 ft and 25 ft, were established.

As long-term corrective action, an Appendix R Task Force was established on the first working day after the NRC inspection exit meeting to reassess PGE's compliance with the now-understood 10 CFR 50.48 and Appendix R. The scope and responsibility of the Task Force was identified in Attachment 3 to PGE's September 28 letter. Completion of the Trojan Appendix R Review is expected by April 1, 1984. Required exemption requests and documentation of the review will be filed by June 1, 1984. Schedules for implementation of any necessary corrective actions will also be provided by June 1, 1984. Any necessary modifications will be performed on a schedule consistent with safety significance, material availability, and Plant operating cycle. We will be in full compliance with 10 CFR and Appendix R, as we now understand them, prior to return to power operation from the 1985 refueling outage.

NRC Finding B

10 CFR 50, Appendix B, Section III.G.1.b, requires that systems necessary to achieve and maintain cold shutdown from a control room or emergency control station(s) can be repaired within 72 hr.

Contrary to the above, at the time of the inspection the redundant trains of equipment and cabling necessary to achieve cold shutdown conditions were not capable of being repaired within 72 hr, as demonstrated by the absence of planning, procedures, and/or materials necessary to implement fire damage repairs. Further, these systems were not sufficiently protected to survive the effects of a single fire as described below:

1. The two residual heat removal (RHR) pumps were located in separate rooms in the Auxiliary Building at the 5-ft elevation. The wall separating the pumps and other enclosing walls had open penetrations. Also, the access doors to the rooms were constructed with non-closing ventilation louvers. Transient combustibles consisting of anti-C clothing, paper tape, etc, were stored on open shelves in the access area outside the RHR rooms. Also, the RHR pump power cables were not protected to preclude the loss of both trains of equipment from a fire in either of the pump rooms or the adjacent access area.
2. The boric acid transfer pumps, Trains A and B were located on the 65-ft elevation in the Fuel Building. The pumps were in a common area within approximately 12 ft of each other and were not protected by an automatic fire suppression system. The pump power cables were also located in the common area and not protected to preclude the loss of both pumps due to a fire in the area.

PGE Response

PGE denies that this item is a violation of Section III.G.1.b. Systems that were necessary to achieve and maintain cold shutdown from a control room or emergency control station(s) were capable of being repaired within 72 hr. Planning had occurred and procedures were available to safely operate the plant and cool it down within 72 hr. Although materials necessary to effect repairs to necessary components were not consolidated or provided in any specific area for availability, it is our opinion that they could be obtained and used well within the 72-hr period. The two trains of RHR equipment and cables are located in separate rooms of the Auxiliary Building at the 5-ft elevation and were therefore concluded to be in separate fire areas (see discussion under response to NRC Finding A pertaining to fire area definition). The common pipe chase between the RHR pump rooms has a 2-hr fire wall around it and contains no fixed combustibles. This general inaccessibility

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would preclude transient combustibles from entering or being left in the pipe chase. Thus, it is not expected that a fire would propagate through this pipe chase to other areas. A fire involving the combustibles in the corridor (approximately 3.1 lb/sq ft combustible loading) will result in a fire duration of less than 30 min, assuming no manual fire-fighting action. Functional loss of the cables in the corridor would not jeopardize safe shutdown because only one safety train of cables runs through the corridor. The RHR heat exchangers and pumps are located in separate rooms and do not have lube oil systems, although the pump motors contain small quantities of lube oil (approximately 2 gal). The RHR pumps are separated by a 13-in.-thick wall. The loading and distribution of the materials at Elevation 5 ft with respect to stairwell locations are such that the fire or smoke will not prevent the use of the stairwell during or after a fire. Thus, manual fire-fighting efforts at Elevation 5 ft for a fire in a pump room, in the corridor, or in any of the other rooms or areas will not jeopardize any safe shutdown functions.

The boric acid transfer pumps are not required for safe shutdown or cooldown for the Trojan Nuclear Plant. They have been provided with decouple switches, as described in PGE-1012, for procedural convenience only. As a result, loss of either one or both of the boric acid transfer pumps would not jeopardize the Plant's capability to safely shut down or cool down within 72 hr.

The NRC apparently views this item as a violation, again, because of PGE's definition of "fire areas" and due to a failure of having necessary specific material for repair of equipment immediately available in one location. PGE prefers to have the equipment and material necessary for repair of the safety-related equipment in the warehouse where it is easily available, but not in a specific location where it is subject to deterioration which could result in complete loss of repair capability.

Nevertheless, PGE immediately sealed the pipe penetrations in the wall between the RHR pumps and performed an analysis to document that boric acid transfer pumps were not needed to achieve and maintain cold shutdown of the Trojan Nuclear Plant (see D. J. Broehl to R. A. Clark letter dated July 15, 1983 - please note that the first sentence in Attachment 2 of this letter is in error - PGE-1012 does not identify the boric acid transfer pumps as required for safe shutdown).

Long-term corrective actions and schedules for completion are the same as described in response to NRC Finding A.

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NEC Finding C

10 CFR 50, Appendix R, Section III.G.2, requires that inside noninerted containments, one of six (A through F) fire protection means shall be provided, such as: separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 ft with no intervening combustibles or fire hazards; or installation of fire detectors and an automatic fire suppression system in the fire area; or separation of cables and equipment and associated non-safety circuits of redundant trains by non-combustible radiant energy shields.

Contrary to the above, at the time of inspection, cabling for both safe shutdown trains and associated non-safety circuits were not adequately separated, and intervening combustibles (other electrical cables) bypassed the installed radiant energy shields at the electrical penetration area inside containment. No automatic fire suppression system had been installed in this area of containment.

PGE Response

PGE denies that this item is a violation of Section III.G.2. PGE did not consider other electrical cable to be an intervening combustible. Appendix R of 10 CFR 50.48 does not identify intervening combustibles as being electrical cables. Electrical cable is only identified as intervening combustibles by an internal NEC memorandum providing clarification, of which PGE obtained a copy shortly before the inspection, prior to being able to take any action on that clarification. As a result and as documented in PGE-1012, PGE concluded that both trains of safety-related cables in the Containment were adequately protected. The only safety-related cables that are closer than 20 ft are away from the immediate vicinity of the penetration area but are separated in accordance with IEEE 384-1977 guidelines. No intersection between redundant cabling exists that would create a fire hazard capable of affecting safe Plant shutdown. This, in combination with a fire barrier in the direct path between redundant shutdown cables and the physical separation distances between the redundant cables and raceways, ensures the integrity of redundant cables in this area (see D. J. Broehl to J. E. Martin letter dated July 8, 1983 for additional details).

Nevertheless, PGE immediately performed stereo-photographs of the cabling in this area to assist our Task Force in reassessing compliance with Appendix R with the Plant in operation and the Containment inaccessible.

Long-term corrective actions and schedules for completion are the same as described in response to NRC Finding A.

NRC Finding D

Section III.G.3 requires that alternate or dedicated shutdown capability and its associated circuits in the area, room, or zone under consideration shall be provided where the protection of systems whose function is required for hot shutdown does not satisfy the requirements of Section III.G.2.

Section III.L.2 requires that process monitoring functions for alternative or dedicated shutdown capability shall be capable of providing direct readings of reactivity and Reactor Coolant System heat removal functions.

Contrary to the above for the control room and cable spreading room, the licensee elected to provide alternate shutdown capability in accordance with Section III.G.3, but, at the time of the inspection, alternative or dedicated shutdown system process monitoring instrumentation was not installed outside the control room and the cable spreading room to provide direct reading for source range neutron flux or the hot and cold leg Reactor Coolant System temperatures.

PGE Response

PGE denies that this item is a violation of Sections III.G.2 and III.L.2. The Trojan Nuclear Plant was licensed prior to January 1, 1979 and is required to meet Sections III.G, III.J, and III.O of Appendix R to 10 CFR 50. If the NRC Commissioners wanted plants licensed prior to January 1, 1979 such as Trojan to comply with Section III.L, they would specifically have stated so. However, the Commissioners specifically said these plants were required to meet only Sections III.G, III.J, and III.O. Requiring all plants to comply with Section III.L is an NRC staff backfit unsubstantiated and unsupported by the NRC Commissioners or 10 CFR 50.48. A more detailed discussion of the nonapplicability of 10 CFR 50, Appendix R, Section III.L, was provided in an attachment to PGE to NRC letter dated September 21, 1982 (B. D. Withers to R. A. Clark), a copy of which is provided as Attachment 3. Trojan is not required, by the regulations, to comply with Section III.L. Thus, this item cannot be considered a violation. Even if Section III.L.2 were to apply, there is no specific requirement in this section for source range neutron flux or hot and cold leg Reactor Coolant System temperatures (these specific measurements were only defined in internal NRC memoranda that were not provided in a timely manner to PGE). Trojan does have methods of monitoring both reactivity and RCS heat removal for alternative shutdown.

There is no reason for the violation to be considered, no corrective steps to be taken, and no date for full compliance to be expected since PGE considers itself to already be in full compliance with 10 CFR 50, Appendix R, regarding alternative shutdown capability. Additional discussion is provided in D. J. Broehl to J. B. Martin letter dated July 8, 1983.

NEC Finding E

10 CFR 50, Appendix R, Section III.O, requires that the reactor coolant pump shall be equipped with an oil collection system. Leakage shall be collected and drained to a vented, closed container that can hold the entire lube oil system inventory.

Contrary to the above, at the time of the inspection, two oil collection tanks had been installed, each with the capacity of 306 gal. Each tank collects oil leakage from two reactor coolant pumps. The reactor coolant pump lube oil system contains approximately 265 gal of oil. Therefore, the potential lube oil leakage of two pumps into a tank exceeds collection capacity by approximately 224 gal.

PGE Response

PGE denies that this item is a violation of Section III.O. The rule is ambiguous as to the sizing or capacity for the reactor coolant pump (RCP) lube oil collection system. The rule can be interpreted either to require the collection container to hold the entire lube oil system inventory of one reactor coolant pump or of all of the reactor coolant pumps. For example, one sentence in Section III.O states: "The reactor coolant pump (singular) shall be equipped with an oil collection system (singular) . . .". Another sentence states: "Such collection systems (plural) shall be capable of collecting lube oil from all . . . leakage sites in the reactor coolant pump (singular) lube oil systems (plural)". And another sentence states: "Leakage shall be collected and drained to a vented, closed container (singular, that can hold the entire lube oil system (singular) inventory". This inconsistent mixing of singular and plural words, together with application of singular and plural words to three different components (reactor coolant pumps, lube oil systems, and oil collection system), made this section of the rule extremely difficult to interpret. As such, PGE provided a description of its lube oil collection system in PGE-1012 that the NEC reviewed and approved. At the time our system was designed, we were advised by the NRC Staff that our tank capacity was acceptable. At no time did PGE ever claim that it had a system capable of providing full capacity, nor was PGE ever informed that its interpretation that partial capacity was unacceptable until such time that the NRC fire protection inspection took place. At that time, PGE was made aware of another internal NRC memorandum providing clarification of the lube oil collection system such that full capacity was necessary. (We have not yet formally received a copy of this memorandum.) Because of the ambiguity of Section III.O, this item cannot be considered a violation.

Nevertheless, immediate corrective action was taken to perform an analysis of the fire hazard associated with the current tank capacity (D. J. Broehl to J. B. Martin letter dated July 8, 1983), and to file a formal exemption request for the Trojan RCP lube oil collection system (D. J. Broehl to E. A. Clark letter dated July 15, 1983).

Long-term corrective actions and schedules for completion are the same as described in response to NRC Finding A.

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NRC Concern On Administrative Controls

The inspection demonstrated that you failed to comply with the new Appendix E requirements. As further discussed in the conference, the underlying cause of this failure was inadequate control of engineering activities, including: (1) an inadequate reassessment of Plant conditions regarding the applicable Appendix E requirements, (2) lack of documentation of reassessments and reviews, and (3) lack of supervisory reviews to assure technical adequacy and accuracy of the reassessments. This reflects a significant breakdown in the administrative controls used to ensure compliance with fire protection requirements.

...your failure to recognize the need for a formal reassessment of the fire protection features at the Trojan facility after the new NRC requirements became effective indicates a serious breakdown in your efforts at ensuring compliance with NRC requirements.

In order to emphasize the importance NRC places on compliance with the fire protection requirements and the need for licensees to maintain proper control over all aspects of safety-related activities, including engineering evaluations A civil penalty is being proposed because of the significance of the administrative breakdown discussed above.

PGE Response

The administrative breakdown upon which this concern is based is not substantiated, in our opinion, by the alleged violations discussed previously under NRC Finding A, B, C, D, or E. PGE does not feel this item can be construed to be a violation as defined in 10 CFR 2, Appendix C. We deny that we failed to comply with Appendix E requirements, as all of the previously alleged violations are based on NRC Staff positions contained in internal clarification memoranda and are not requirements of Appendix E.

Although denying that this broader issue of administrative control is a violation, PGE does agree that the NRC raises valid concerns about our response to Appendix E and potentially other areas involving our response to regulatory inquiries. Our immediate corrective actions and results to these NRC concerns, and to our own management concerns, is detailed in B. D. Withers to J. B. Martin letter dated September 28, 1983.

Long-term corrective actions and schedules for completion are the same as described in response to NRC Finding A and in our aforementioned letter dated September 28, 1983.

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NON-APPLICABILITY OF APPENDIX R, SECTION III.L

PGE's understanding of 10 CFR 50.48(b) is that, "except for the requirements of Sections III.G, III.J, and III.O, the provisions of Appendix R to this part shall not be applicable to nuclear power plants licensed to operate prior to January 1, 1979, . . ." (which have received prior NRC approval of its fire protection features). A strict application of Section III.L requirements is therefore not necessary and was never intended for plants in this category (licensed to operate prior to January 1, 1979), as is Trojan, as long as it can be shown that the plant can be maintained in a safe condition. As stated in the Supplementary Information for Appendix R⁽¹⁾, "The Commission generally agrees that, except for three sections that will be backfitted, Appendix R should not be retroactively applied to features that have been previously approved by the NRC staff as satisfying the provision of Appendix A to BTP APCS 9.5-1". The Trojan Nuclear Plant falls into the latter category, having resolved all fire protection issues with the NRC before Appendix R was ever promulgated⁽²⁾. Section III.G (Safe Shutdown Capability) was one of the sections being backfitted since, as stated in the Supplementary Information, the NRC was no longer allowing credit for fire retardant coatings as fire barriers, as might have been done in the past. Section III.L (Alternate Shutdown Capability) was not listed as being one of the backfitted sections. Indeed, some of the requirements of Section III.L are more burdensome for the alternate shutdown systems than the requirements of Section III.G for the base shutdown systems. For example, Section III.G requires that one train of safe shutdown equipment be free from fire damage in order to achieve and maintain hot shutdown conditions and that systems necessary for cold shutdown can be repaired within 72 hr. Section III.L requires that the alternate shutdown systems be able to actually achieve cold shutdown within 72 hr (concurrent with a loss of offsite power during the fire). These requirements are clearly more burdensome and would have been included in the list of backfit items if this was the intent. Thus, it is clear that Section III.G was applied to all plants due to a concern over credit for fire retardant coatings as barriers and that the more restrictive and burdensome requirements of Section III.L were never intended to be rigidly applied to older plants like Trojan. The contention that a strict application of Section III.L is not required is also consistent with the recent United States Court of Appeals' determination that the exemption

(1) Federal Register, Vol. 45, No. 225, Wednesday, November 19, 1980, p. 76602-76616.

(2) NRC fire protection safety evaluation report for Trojan dated March 9, 1979 and amended on March 25, 1980 and October 6, 1980.

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procedure gives utilities a fourth alternative if it can be shown that another method works as well as one of the three methods stipulated by the NRC in Section III.G of Appendix R⁽³⁾. Application of the more stringent requirements of Section III.L is not warranted here.

(3) United States Court of Appeals for the District of Columbia Circuit Judgment in the Petition for Review of an Order of the Nuclear Regulatory Commission (No. 81-1050 Argued January 24, 1982 and Decided on March 16, 1982).

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10 CFR 2
RESPONSE TO PROPOSED
IMPOSITION OF CIVIL PENALTIES

Portland General Electric Company (PGE) has reviewed the Proposed Imposition of Civil Penalty and protests the amount of the proposed civil penalty in its entirety, and requests remission or substantial mitigation.

At the time of the special fire protection inspection, PGE had an approved fire protection plan, an approved SER from the NRC, fire protection Technical Specifications, and had received assurance from the NRC staff that no further action was necessary with regard to Appendix E.

The items for which PGE is claimed to be in violation are in fact not a part of federal regulations at all, but are clarifications contained in NRC internal memoranda which had never been formally transmitted to PGE. PGE had provided comments on the proposed rule (C. Goodwin to Secretary of the Commission letter dated June 27, 1980), indicating to the NRC that operating plants would have difficulty with interpretations and compliance unless revisions were made. Our exact words were:

"In general, the proposed rule is far too vague for effective implementation. There is a significant lack of definitions, and the usage of many terms is such that it is not clear what is meant. Without additional clarification, the rule is subject to individual and various interpretations, both by regulatory agencies and licensees."

Nevertheless, the rule was published leaving many items subject to interpretation by both the licensee and the NRC staff (obviously requiring the need for internal NRC staff clarifications). Certain ambiguities were pointed out in PGE's letter in support of an exemption request dated September 21, 1982 (B. D. Withers to R. A. Clark).

As discussed at the Enforcement Conference on September 9, we are concerned about the lack of objectivity by one of the members of the inspection team. Specifically, this individual had previously worked at Trojan as a consultant until such time that he was asked to leave because of his ineffectiveness. With the rule being as ambiguous as it is, it is possible for inspection team members to both interpret regulations and to subsequently inspect against them, thus leading to apparent violations.

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The NRC commissioners obviously felt that only Sections III.G, III.J, and III.O should be applied to operating nuclear plants licensed prior to January 1, 1979. As such, the NRC commissioners are not on record as supporting the requirement to comply with Section III.L; this is an unwarranted and unjustified staff backfit requirement.

In accordance with Section IV.B of 10 CFR Part 2, Appendix C, PGE provides the following information:

1. Prompt Identification and Reporting

Upon receipt of NRC Generic Letter 81-12, PGE identified certain areas within the Trojan Nuclear Plant which were not in strict compliance with the rule. In spite of assurances from NRC staff that all action for Trojan was completed (per the final SER issued on October 6, 1980), PGE promptly identified those items to the NRC in a letter dated March 19, 1981. Subsequently, the NRC requested these items be resubmitted in an exemption request. This was accomplished in a letter dated May 5, 1981. Prior to the June 20-24, 1983 special fire protection inspection, PGE had no indication that its interpretations and positions previously established and accepted in Topical Report PGE-1012 were unacceptable to the NRC or would be considered to be in noncompliance with federal regulations using the NRC clarifying memoranda as bases. Nevertheless, PGE fully cooperated with the NRC and promptly reidentified those areas, equipment, and cabling which were unacceptable to the NRC clarifying criteria and special inspection team. Although not subject to LER criteria, these items were promptly reported in a letter dated July 8, 1983 showing why the Trojan Nuclear Plant still had adequate fire protection and was safe to operate.

Regarding the broader NRC concern about breakdown in administrative controls at PGE, it was PGE management who promptly identified and brought these same concerns to the NRC's attention as a result of our own internal management reviews.*

2. Corrective Action to Prevent Recurrence

Following the special fire protection inspection, PGE took prompt and extensive corrective action to address the NRC

* The results of these reviews were discussed with Mr. Johnson and Mr. Crews of the NRC Region V during their PGE inspection on July 26-28, 1983.

concerns that were expressed at the exit interview on June 24, 1983. These actions included:

- a. Performance of an internal management review by an independent consultant the week of June 27, 1983 (the week following the NRC special inspection) to identify organizational and root causes of the apparent violations.*
- b. Performance of a review by the PGE Quality Assurance Department, which commenced on June 24, 1983 and was completed on July 1, 1983, to determine the causes of the apparent violations.*
- c. Immediate and direct involvement by PGE's senior management commencing June 24, 1983, including the PGE President and the Vice President, Nuclear, to determine the causes of the apparent violations and to give top priority to resolution of Appendix K and other generic issues.
- d. The formation of a multi-disciplinary task force on June 27, 1983 (first working day after the exit meeting) headed by the Branch Manager of Systems and Analysis to reassess compliance with Appendix K. The initial meeting for this task force was on June 29, 1983, the result of which was an action plan and definition of responsibilities. The progress of this task force effort is discussed in Attachment 3 of Bart D. Wither's September 28, 1983 letter to Mr. John B. Martin.
- e. The completion on July 8, 1983 of a safety evaluation on the findings of the NRC special inspection, followed by a second report on July 15, 1983 (documented in letters to the NRC on these dates).
- f. The completion on July 17, 1983 of Plant fire protection modifications and compensatory measures resulting from review of the apparent violations.
- g. Performance of surveillances by the PGE Quality Assurance Department on July 28, September 7, and September 28, 1983 to assure the completion and implementation of the modifications and measures identified in Item f above.

* The results of these reviews were discussed with Mr. Johnson and Mr. Crews of the NRC Region V during their PGE inspection on July 26-28, 1983.

- h. Initiation of revised procedural controls on July 8, 1983 with issue dates of July 18, 1983 and August 6, 1983 for improved management control of regulatory issues.
- i. Performance of immediate spot checks to identify areas other than fire protection where insufficient reviews of regulatory requirements were performed by PGE.
- j. Development of a formal regulatory requirements verification program to review handling of regulatory issues at PGE since 1979.

3. Enforcement History

PGE has received no previous enforcement actions in the area of fire protection, nor have we previously been held remiss in the adequacy of our responses to NRC requests for information or analyses. PGE was responsive to pre-Appendix R fire protection requirements by the NRC and had, in fact, already installed additional barriers, deluge systems, detection systems, alternative shutdown systems, and oil collection systems totaling over \$7 million in modification costs. Additionally, PGE had received a favorable final SER on fire protection in October 1980. In the NRC's 1982 SALP program, PGE was rated Category I in the areas of licensing activities and design changes and modifications, and Category II in fire protection and housekeeping.

4. Prior Notice of Similar Events

PGE had been aware of the NRC special fire protection inspections conducted at two other plants prior to Trojan's inspection. Based on the results of those inspections, several changes to Plant procedures were implemented. Otherwise, we believed Trojan to be in compliance with the applicable sections of Appendix R (internal NRC clarification memorandum notwithstanding).

5. Multiple Occurrences

The amount of the proposed civil penalty should not be increased because of multiple occurrences since the cause for all of the alleged violations is attributed to difficulty in the interpretation of Appendix R requirements, not only by PGE but other licensees as well.



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

DEC 19 1983

Docket No. 50-344
EA 83-85

Portland General Electric Company
ATTN: Mr. Bart D. Withers
Vice President, Nuclear
121 S.W. Salmon Street
Portland, Oregon 97204

Gentlemen:

Reference: NRC Inspection Report No. 50-344/83-18

This refers to your letter dated October 28, 1983 in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you with our letter dated September 29, 1983. Our letter and Notice described violations identified during a special NRC inspection, conducted on June 20-24, and July 26-28, 1983, to assure compliance with 10 CFR 50.48 and Sections III.G, III.J, and III.O of Appendix R to 10 CFR Part 50 relating to fire protection.

After careful consideration of your response, we have concluded for the reasons given in the enclosed Order and Appendix that a sufficient basis for 50% mitigation of the proposed penalty based upon your prompt and extensive corrective action is warranted. Accordingly, we hereby serve the enclosed Order on Portland General Electric Company imposing a civil penalty in the amount of Fifty Thousand Dollars (\$50,000).

We will review the effectiveness of your corrective actions taken, and those proposed, during subsequent inspections.

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,

A handwritten signature in cursive script, appearing to read "Richard C. DeYoung".

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Order Imposing Civil Monetary Penalty

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

PORTLAND GENERAL ELECTRIC COMPANY
(Trojan Nuclear Facility)

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Docket No. 50-344
License No. NPF-1
EA 83-85

Order Imposing Civil Monetary Penalty

I

Portland General Electric Company, 121 S.W. Salmon Street, Portland, Oregon 97204 (the "licensee") is the holder of License No. NPF-1 issued by the Nuclear Regulatory Commission (the "Commission" or "NRC") which authorizes the licensee to operate the Trojan Nuclear Facility at Rainier, Oregon in accordance with the conditions specified therein. License No. NPF-1 was issued on November 21, 1975 and has an expiration date of February 8, 2011.

II

An NRC review of the licensee's activities under the license was conducted on June 20-24 and July 26-28, 1983 to assure compliance with 10 CFR 50.48 and, in particular, Sections III.G, III.J, and III.O of Appendix R to 10 CFR Part 50 relating to fire protection. As a result of this review, it appears 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

September 29, 1983. The Notice states the nature of the violations, the provisions of the Nuclear Regulatory Commission requirements that the licensee had violated, and the amount of civil penalty proposed. An answer dated October 28, 1983 to the Notice of Violation and Proposed Imposition of Civil Penalty was received from the licensee.

III

Upon consideration of the answers received and the statements of fact, explanation and argument for remission or mitigation of the proposed civil penalty contained therein, and as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined that the penalty proposed for the violations designated in the Notice of Violation and Proposed Imposition of Civil Penalty should be mitigated by 50% based upon the licensee's prompt and extensive corrective action.

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 in the amount of Fifty Thousand Dollars (\$50,000) within thirty 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 of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

The licensee may, within thirty days of the date of this Order, request a hearing. A request for a hearing shall be addressed to the Director, Office of Inspection and Enforcement. A copy of the hearing request shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555. If a hearing is requested, the Commission will issue an Order designating the time and place of hearing. Upon failure of the licensee to request a hearing within thirty days of the date of this Order, the provisions of this Order shall be effective without further proceedings and, if payment has not been made by that time, the matter may be referred to the Attorney General for collection.

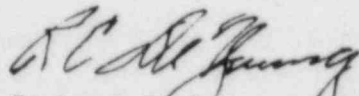
VI

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 violated NRC requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty; and

(b) whether, on the basis of such violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this ~~19th~~ day of December 1983

Appendix

Statement of Violation A

10 CFR 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 station(s) is free of fire damage.

Sections III.G.2 and III.G.3 specify four alternatives that may be implemented outside of primary containment to assure that one redundant train of equipment, cabling and associated circuits necessary to achieve and maintain hot shutdown remains free of fire damage. The alternatives are:

1. Separation of redundant trains of equipment, cabling and associated circuits by a three-hour rated fire barrier.
2. Enclosure of redundant trains of equipment, cabling and associated circuits by a one-hour rated fire barrier with fire detection and automatic fire suppression systems installed in the area.
3. Separation of redundant trains of equipment, cabling and associated circuits by a horizontal distance of 20 feet with no intervening combustibles and fire detection and automatic fire suppression systems installed in the area.
4. Installation of alternative or dedicated shutdown capability independent of the equipment, cabling and associated circuits under consideration, and installation of fire detection and fixed fire suppression systems in the area under consideration.

Contrary to the above requirements, at the time of the inspection, fire protection features were not provided for certain redundant trains of equipment and/or cabling necessary to achieve and maintain hot shutdown conditions such that one train would remain free of fire damage. Specifically, regarding the centrifugal charging pumps and associated coolers, none of the alternatives provided by Section III.G.2 and III.G.3 were implemented, and Section III.G.1.a was violated. The two reactor coolant system centrifugal charging pumps and associated coolers necessary to achieve and maintain hot shutdown would not remain free of fire damage in the event of a fire in either of the pump rooms or the adjacent access area. The wall separating the pump rooms had open penetrations and the power supply cables were not protected to preclude loss of both trains of equipment.

Summary of Licensee's Response

The licensee denies that this item is a violation of Section III.G.1, III.G.2 or III.G.3. The licensee states that the requirements of III.G.1 are met because the two centrifugal charging pumps (CCP's) are not in the same fire area as defined in Topical Report PGE-1012 which was reviewed and approved by the NRC. The licensee argues that the final NRC rule on fire protection did not provide a new definition of fire area and only an internal NRC clarifying memorandum used by the NRC inspection team indicated that the previously accepted definition of fire area was unacceptable. The licensee argues that the CCP's are twelve feet apart and located in separate rooms, separated by a 13 inch thick wall. In addition, PGE asserts that the fire loading of combustibles is such that a fire in one CCP room would not spread to the other CCP room even though a pipe chase and penetrations exist in the separation wall between the two rooms. Finally, the licensee argues that the loss of one or more CCPs could be compensated for by use of either of two safety injection pumps or a positive displacement pump, which could not be realistically expected to fail as a result of a fire in one of the CCP rooms.

NRC Evaluation

The licensee's argument that each CCP room is a separate fire area is incorrect. "Fire Area" is defined in (1) Branch Technical Position APCS 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants," dated May 1976, for new plants docketed after July 1, 1976, and in (2) Appendix A to BTP APCS 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976," dated August 23, 1976, for plants that were operating or under various stages of design or construction before July 1, 1976. 10 CFR 50.48(a) contains an explicit reference to the BTP and Appendix A so the licensee's assertion that a clear definition of fire area was not available is incorrect. Further, as noted in the licensee's Fire Protection Program, PGE-1012, BTP APCS 9.5-1 and Appendix A to BTP APCS 9.5-1 were received by the licensee in 1976.

BTP APCS 9.5-1, Section B.4, Definitions, defines a "Fire Area" as that portion of a building or a plant that is separated from other areas by boundary fire barriers and "Fire Barriers" as "those components of construction (walls, floors, and their supports), including beams, joists, columns, penetration seals or closures, fire doors, and fire dampers that are rated by approving laboratories in hours of resistance to fire and are used to prevent the spread of fire." Appendix A to BTP APCS 9.5-1, Section D.1(j) states that penetrations in fire barriers, including conduits and piping, should be sealed or closed to provide a fire resistance rating at least equal to that of the fire barrier itself.

Arguments concerning fire loading notwithstanding, the wall separating the two CCP's had penetrations which were not sealed and did not have a fire rating equal to that of the fire barrier itself. Therefore, the wall cannot be considered a fire barrier and the pumps must be considered to be in the same fire area. The licensee states that fire areas were clarified in Topical Report

PGE-1012, that NRC had issued a Safety Evaluation Report (SER) on this document, and that there was no reason to believe that the definition of fire areas in this document was inappropriate. PGE did not provide definitions of "fire area" or "fire barrier" so the NRC was not aware that PGE's interpretation did not take into account penetrations and seals. Furthermore, Topical Report PGE-1012 did not identify the separation wall between the two centrifugal charging pumps as a fire barrier; thus NRC did not review it as such. Finally, as noted in the proposed action, if an adequate technical review had been performed by the licensee, any confusion as to the meaning of the terms used in Appendix R could have been identified and resolved.

Statement of Violation B

10 CFR 50, Appendix R, Section III.G.1.b, requires that systems necessary to achieve and maintain cold shutdown from the control room or emergency control station(s) can be repaired within 72 hours.

Contrary to the above, at the time of the inspection, the redundant trains of equipment and cabling necessary to achieve cold shutdown conditions were not capable of being repaired within 72 hours as demonstrated by the absence of planning, procedures, and/or materials necessary to implement fire damage repairs. Further, these systems were not sufficiently protected to survive the effects of a single fire as described below:

1. The two residual heat removal (RHR) pumps were located in separate rooms in the auxiliary building at the 5 foot elevation. The wall separating the pumps and other enclosing walls had open penetrations. Also, the access doors to the rooms were constructed with nonclosing ventilation louvers. Transient combustibles consisting of anti-C clothing, paper, tape, etc. were stored on open shelves in the access area outside the RHR rooms. Also, the RHR pump power cables were not protected to preclude the loss of both trains of equipment from a fire in either of the pump rooms or the adjacent access area.
2. The boric acid transfer pumps, Trains A and B, were located on the 65 foot elevation in the fuel building. The pumps were in a common area, within approximately 12 feet of each other, and were not protected by an automatic fire suppression system. The pump power cables were also located in the common area and not protected to preclude the loss of both pumps due to a fire in the area.

Licensee's Response

PGE denies the violation. PGE contends that the two systems are not susceptible to damage by fire, but claims that, even if they were damaged, they were capable of being repaired within 72 hours.

The licensee argues that the two trains of RHR equipment and cables are in two separate rooms separated by a 13 inch wall and that the common pipe chase had a two hour fire wall around it. The licensee states that since only one train of cables runs through the corridor, a fire there would not jeopardize safe shutdown.

Further, the licensee argues that the boric acid transfer pumps are not required for safe shutdown or cooldown of the Trojan Plant. Finally, PGE claims that although it does not have specific material for repair of equipment immediately available in one location, the material is available in the warehouse where it is easily available and not subject to deterioration.

NRC Evaluation of Licensee Response

Although the RHR pumps are in separate rooms, for the reasons discussed in the response to Violation A above, the wall between the rooms is not a three hour fire barrier nor are the other separation criteria of Section III.G met. Thus, a fire in the area could cause a loss of both RHR pumps.

The licensee, in PGE-1012, previously identified the Boric Acid Transfer Pumps as necessary "Components Required to Safely Shut down the Plant." Specifically, these pumps were identified as being required for boration which is required to achieve safe shutdown and these pumps were, therefore, included in the inspection. Although the licensee now claims these pumps are not necessary for safe shutdown, having identified them as necessary prior to the inspection, the licensee was obligated to assess compliance with Appendix R for this equipment.

Although it might not be necessary for repair material to be onsite, there was no indication during the inspection, nor has PGE supplied any evidence in its response, of any plans or procedures that would be used to make such repairs. The licensee has not demonstrated that it has: (1) identified what equipment might be damaged by fire; (2) what material would be necessary to repair it; (3) where that material is located; (4) if material out of the general warehouse is to be used, what mechanism is in place to assure it will not be used up in routine repairs or maintenance; or (5) performed any analysis to show that potential damage could be repaired within 72 hours.

Statement of Violation C

10 CFR 50, Appendix R, Section III.G.2 requires that inside non-inerted containments one of six (a through f) fire protection means shall be provided such as: separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards; or installation of fire detectors and an automatic fire suppression system in the fire area; or separation of cables and equipment and associated non-safety circuits of redundant trains by a noncombustible radiant energy shield.

Contrary to the above, at the time of inspection, the cabling for both safe shutdown trains and associated non-safety circuits were not adequately separated and intervening combustibles (other electrical cable) bypassed the installed radiant energy shields at the electrical penetration area inside containment. No automatic fire suppression system had been installed in this area of containment.

Licensee's Response

PGE denies that a violation exists. PGE says that it did not consider other electrical cables as an intervening combustible. PGE contends that this interpretation of the requirement in Appendix R has only been set forth in an internal NRC Memorandum and thus PGE did not take action based on such an understanding of the regulation. PGE had concluded that both trains of safety-related cables in the containment were adequately protected.

NRC Evaluation of Licensee Response

The Statement of Considerations which was published at the time 10 CFR 50.48 and Appendix R were issued (45 FR 62789, September 22, 1980) discussed each of the sections of Appendix R. In the discussion under Section III.G. of separation criteria, it is noted that this means of fire protection may be used "when redundant trains and associated circuits are separated by 20 feet or more of clear space," (emphasis added).

Throughout PGE Topical Report 1012, "Trojan Nuclear Plant Fire Protection Program," the fire hazards described for various areas of the plant include combustible materials in the form of electrical cable. (See, e.g., 3.4-4, 3.4-7, Table 3-1.) Thus, PGE has itself recognized that cables are intervening combustibles. Moreover, the term "clear space" used to explain the 20 foot separation criteria in the Statement of Considerations is unambiguous.

Statement of Violation D

Section III.G.3 requires that alternate or dedicated shutdown capability and its associated circuits in the area, room or zone under consideration, shall be provided where the protection of systems whose function is required for hot shutdown does not satisfy the requirements of Section III.G.2.

Section III.L.2 requires that process monitoring function for alternative or dedicated shutdown capability shall be capable of providing direct readings of reactivity and reactor coolant system heat removal functions.

Contrary to the above, for the control room and cable spreading room, the licensee elected to provide alternate shutdown capability in accordance with Section III.G.3 but, at the time of the inspection, alternative or dedicated shutdown system process monitoring instrumentation was not installed outside the control room and the cable spreading room to provide direct reading for source range neutron flux or the hot and cold leg reactor coolant system temperatures.

Licensee's Response

PGE denies that this item is a violation of Sections III.G.2 and III.L.2. PGE asserts that when Appendix R to 10 CFR Part 50 was issued, the Commissioners specifically said that plants licensed prior to January 1, 1979 were required to meet only Sections III.G, III.J and III.O. Requiring all such plants to comply with III.L is an NRC staff backfit unsubstantiated and unsupported by the language of 10 CFR 50.48.

Even if III.L.2 were to apply, the licensee's argument continues, there is no specific requirement in this section for source range neutron flux or hot and cold leg Reactor Coolant System temperatures. These specific measurements were only defined in NRC internal memoranda which were not provided in a timely manner to PGE. Trojan does have methods of monitoring both reactivity and RCS heat removal for alternative shutdown.

NRC Evaluation of Licensee Response

While 10 CFR 50.48, when describing those requirements of Appendix R which apply to plants licensed prior to January 1, 1979, listed only III.G, III.J, and III.O, when the rule is read as a whole, it is apparent that Section III.L would serve no purpose if it is not read together with III.G. Section III.G provides that if adequate fire protection features are not provided in a given fire area, an alternative or dedicated shutdown capability must be provided which assumes loss of all shutdown equipment in that area. Section III.L is entitled "Alternative and dedicated shutdown capability," and opens with the words, "Alternative or dedicated shutdown capability provided for a specific fire area shall be able to..." and provides design criteria for alternative or dedicated shutdown systems required by III.G. Since Appendix R applies only to pre-1979 operating plants, one cannot suggest that Section III.L was to be somehow prospective in effect or applied only through "open items" remaining in NRC Staff analyses of plants against Appendix A to Branch Technical Position BTP APCS 9.5-1. This would result in different criteria applying to some plants for an element of safe shutdown capability which the Commission had specifically determined to backfit. Such an anomalous situation was not intended by the Commission. Indeed, the Utility Group's challenge to the fire protection requirements and the court's decision upholding the rule both were premised on the assumption that Section III.L was a part of the rule being applied to plants licensed prior to January 1, 1979.

PGE has spare equipment that could be used to provide an alternate source range neutron detector. However, no specific plant administrative procedures existed to prevent the removal of parts from the spare drawer to ensure their readiness for operational use. In addition, facility procedures did not specify the equipment or methods used to accomplish temperature monitoring under post-fire shutdown conditions. Although PGE has stated that they have methods for monitoring both reactivity and RCS heat removal for alternative shutdown, the lack of procedures to implement alternative monitoring of selected parameters, and the lack of control procedures to ensure availability and operability of equipment, does not assure that post-fire monitoring as defined in Section III.L.2 can be met.

Statement of Violation E

10 CFR 50, Appendix R, Section III.O. requires that the reactor coolant pump shall be equipped with an oil collection system. Leakage shall be collected and drained to a vented closed container that can hold the entire lube oil system inventory.

Contrary to the above, at the time of the inspection, two oil collection tanks had been installed, each with a capacity of 306 gallons. Each tank collects oil leakage from two reactor coolant pumps. A reactor coolant pump lube oil system contains approximately 265 gallons of oil. Therefore, the potential lube oil leakage of two pumps into a tank exceeds collection capacity by approximately 224 gallons.

Summary of Licensee's Response

The licensee denies that this item is a violation of Section III.0 of Appendix R to 10 CFR 50. The licensee argues that Section III.0 is ambiguous as to the capacity of the lube oil collection system for the reactor coolant pump (RCP) and the inconsistent mixing of singular and plural words to three different components (reactor coolant pumps, lube oil systems and oil collection system) made Section III.0 extremely difficult to interpret. PGE claims it provided a description of its lube oil collection system in PGE-1012, which the NRC reviewed and approved, which did not indicate that it had a system capable of providing full capacity. PGE claims it was first informed that partial capacity was unacceptable when the NRC fire protection inspection took place. At the time of the NRC fire protection inspection, PGE was made aware of an internal NRC memorandum providing clarification of the lube oil collection system such that full capacity was necessary.

NRC Evaluation

Section III.0 states that if a containment is not inerted during normal operation, an oil collection system shall be designed, engineered and installed so that failure will not lead to fire during normal or design basis accident conditions and that the system will withstand the Safe Shutdown Earthquake. Section III.0 also states that such collection systems shall be capable of collecting lube oil from all potential pressurized and unpressurized leakage sites in the reactor coolant pump lube oil systems, and leakage shall be collected and drained to a vented closed container that can hold the entire lube oil system inventory.

It is clear from the use of the word "entire" that the collection system should have capability of holding the whole inventory. Furthermore, it is clear PGE's description of its collection system in PGE-1012 was approved prior to the effective date of Appendix R and the Commission made it clear when Appendix R took affect that it intended to backfit Section III.0 and that the intent of this section is the capability of collecting any lube oil leakage that could occur which could include the entire inventory of all reactor coolant pumps.

Licensee General Concerns

The licensee states that no breakdown in administrative controls occurred and this item cannot be considered a violation. Furthermore, the licensee states that none of the alleged violations involve a direct noncompliance with any particular provision of applicable law, that the severity level has not been evaluated for each individual violation and that a separate civil penalty has not been assessed for each violation.

NRC Response

The NRC identified the breakdown in administrative controls involving (1) an inadequate reassessment of plant conditions regarding the applicable Appendix R requirements, (2) lack of documentation of reassessments and reviews, and (3) lack of supervisory reviews to assure technical adequacy and accuracy of the reassessments as the root cause of the violations identified in the Notice of Violation. After careful review of the licensee's response, the staff has concluded that the breakdown in administrative controls did occur as stated. The licensee did not devote adequate attention to understanding and implementing the Appendix R requirements. Guidance was available to the licensee and if the licensee's engineering assessment of the status of compliance with Appendix R had been of the quality expected by the NRC, any confusion as to what the new rule required would have been detected and promptly resolved. The NRC did not consider this breakdown in administrative controls to be a separate violation. Rather, the fact that this was the cause of the individual violations resulted in the decision to propose a cumulative civil penalty of \$100,000 for the violations.

Each of the violations is a violation of 10 CFR Part 50, Appendix R, a valid regulatory requirement. Each of the violations could have been considered as a separate violation and a separate civil penalty assessed for each. In accordance with the NRC's Enforcement Policy, 10 CFR Part 2, Appendix C, the violations were evaluated in the aggregate as a Severity Level III problem. The Policy provides that, to focus on the fundamental underlying causes of a problem for which enforcement action appears warranted, the cumulative total for all violations which contributed to or were unavoidable consequences of that problem will generally be based on the amount shown in the table, as adjusted. All of the violations stemmed from the same underlying cause - a significant breakdown in administrative controls of engineering activities. The base civil penalty for one Severity Level III violation is \$40,000. In view of the multiplicity of violations and the significance with which the cause of the violations is viewed, the NRC determined that the base civil penalty amount should be adjusted upwards to \$100,000.

Licensee Statements Concerning Mitigation

The licensee requested remission or substantial mitigation of the proposed civil penalty based on the mitigation factors stated in Section IV.B of 10 CFR Part 2, Appendix C as follows:

Prompt Identification and Reporting

PGE asserts that mitigation for prompt identification and reporting is appropriate.

NRC Response

The violations of Appendix R were identified during an NRC inspection. Had the licensee done an adequate assessment of its compliance with Appendix R, it could have avoided the violations by making the necessary modifications or by requesting appropriate exemptions. No credit for prompt identification or reporting is appropriate.

Corrective Action

The licensee asserts that mitigation should be given for the corrective actions it took after the violations were identified by the NRC. With regard to the violation of Section III.G. 1, the licensee took immediate action to seal all pipe penetrations in the separation wall between the CCP rooms with 3-hour seals, seal the opening above the B train CCP room, install a fire damper in the heating and ventilation duct penetration between the CCP rooms and install hatch covers on the hoistway openings in the Auxiliary Building. Additionally, two hour fire watch patrols of the Auxiliary Building with hourly patrols of Elevations 5 feet and 25 feet were established. Long-term corrective actions were described in letters to the NRC dated July 8 and September 28, 1983. An Appendix R Task Force was created the first working day after the NRC inspection exit meeting. Completion of this task force's efforts is expected by April 1, 1984 and schedules for implementation of any necessary corrective action will be provided by June 1, 1984. Full compliance with 10 CFR 50 and Appendix R will be achieved prior to return to power operation from the 1985 refueling outage.

NRC Response

The NRC has reviewed these actions and the ten areas of corrective action identified as items 2.a through 2.j of Attachment 2 to the licensee's response dated October 28, 1983. As a result of this review, the NRC has concluded that the corrective actions taken were prompt and extensive. Accordingly, the civil penalty amount has been mitigated by 50% in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C.

Enforcement History

The licensee states that it has received no previous enforcement citations in the area of fire protection, has been responsive to NRC's request for information on analyses, and has received a favorable SALP rating in fire protection.

NRC Response

This factor allows the NRC to increase a civil penalty as much as 25% for failure to implement corrective action for prior similar problems. The NRC has not escalated the penalty for this reason in this case.

Prior Notice of Similar Events

The licensee states that based on special fire protection inspections conducted at two other plants prior to the Trojan fire inspection, several changes to plant procedures were implemented.

NRC Response

The base civil penalty may be increased as much as 25% for cases where the licensee had prior knowledge of a problem as a result of a licensee audit, or specific NRC or industry notification, and had failed to take effective preventive steps. The NRC has not escalated the civil penalty based upon this factor. The enforcement policy does not provide for mitigation for action taken by the licensee based on prior notice of similar events.

Multiple Occurrences

The licensee states that the civil penalty should not be increased because of multiple occurrences, since the alleged violations can be attributed to differences in interpretation of Appendix R requirements.

NRC Response

The civil penalty proposed by the NRC was based on the licensee's failure to conduct an adequate reassessment of the fire protection features at the Trojan facility after Appendix R became effective. If an adequate reassessment had been conducted, any confusion regarding the correct interpretation of Appendix R could have been resolved. Because the NRC considers this a serious breakdown in the licensee's efforts to ensure compliance with NRC requirements, an escalated civil penalty was assessed.

Conclusions

The violations did occur as originally stated. However, as discussed above, the civil penalty has been mitigated by 50% based upon the licensee's prompt and extensive corrective action.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

1450 MARIA LANE, SUITE 210
WALNUT CREEK, CALIFORNIA 94596

DEC 08 1983

Docket No. 50-362
License No. NPF-15
EA 83-126

Southern California Edison Company
ATTN: C. B. McCarthy, Vice President, Advanced Engineering
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Gentlemen:

This refers to the inspections conducted by Messrs. A. E. Chaffee, J. P. Stewart and A. J. D'Angelo of this office, during the period of September 17 through October 28, 1983, of activities authorized by NRC License No. NPF-15 at the San Onofre Unit 3 facility. The report of the inspection was forwarded to you on December 5, 1983.

The inspection included an examination of the facts and circumstances associated with the unusual event on September 29, 1983 involving an inappropriate isolation of the charging pumps. You provided this office with prompt and follow-up reports of the events in reports dated September 30 and October 17, 21, and 28, 1983. The results of the inspection were discussed by Mr. Chaffee with Mr. H. B. Ray and other members of your staff on October 21, 1983. In addition, the circumstances associated with the event and violations of regulatory requirements were the subject of an enforcement conference conducted by Messrs. DeYoung and Martin with Mr. Gould, Chairman of the Board and Chief Executive Officer, Mr. D. J. Fogarty, and other members of your staff on November 21, 1983.

The isolation of the charging pumps was performed in violation of your administrative procedures and resulted in exceeding three limiting conditions for operation of the technical specifications as described in the attached Notice of Violation.

The apparent underlying causes of the event were: (1) inadequate review and approval of a plant engineering recommendation to the operations staff to locate the source of apparent leakage from the reactor coolant system, (2) informal communication of the engineering recommendation to operations personnel, (3) failure of the operations staff to follow the administrative procedure specifically designed to preclude this type of event, and (4) lack of awareness on the part of the operations staff of the consequences of isolating the charging system as related to the technical specifications.

Further, a previous failure on the part of the operations staff to follow established procedures and be cognizant of technical specifications as called to your attention as the primary cause of the violations that resulted in our

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Notice of Violation and Proposed Imposition of Civil Penalties dated March 24, 1983. Also, the events reported by you in LER No. 83-46, involving the inoperability of both emergency diesel generators and LER No. 83-44, involving an inappropriate opening of a containment isolation valve, were both caused by the operations staff's failure to follow established procedures.

To emphasize the importance NRC places on: (1) conducting licensed activity in accordance with established procedures, (2) the need for appropriate training to assure that licensed operators are fully cognizant and aware of pertinent regulatory requirements, and (3) the need for appropriate reviews and approval of engineering activities and recommendations, I have been authorized, after consultation with the Director of the Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Forty Thousand Dollars (\$40,000) for the violations set forth in the enclosed notice. These violations have been categorized as a Severity Level III problem in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C.

You are required to respond in writing to the Notice attached to this letter. In preparing your response, you should follow the instructions specified in the Notice. Your written reply will be the basis for determining whether additional enforcement actions are warranted.

The responses directed by this letter and accompanying 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.

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 enclosure will be placed in the NRC's Public Document Room.

Sincerely,
Original Signed by
John B. Martin
J. B. Martin
Regional Administrator

Enclosure:
Notice of Violation and
Proposed Imposition of Civil Penalty
cc w/enclosure:
W. Gould, SCE
D. J. Fogarty, SCE
H. B. Ray (San Clemente)
J. G. Haynes (San Clem)

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Southern California Edison Company
San Onofre Nuclear Generating
Station, Unit No. 3

Docket No. 50-362
License No. NPF-15
EA 83-126

On September 30 and October 17, 1983, the licensee provided reports of an unusual event involving isolation of charging flow to the reactor coolant system (LER No. 83-73). The licensee reported the facts and circumstance as follows:

"As a result of excessive unidentified leakage from the Reactor Coolant System (RCS), Unit 3 was placed in Mode 3 at 1205 on September 29, 1983, and action was initiated to localize the source of the leakage. This action was in accordance with Limiting Condition for Operation (LCO) 3.4.5.2, Action Statement 'b'. In preparation for cooldown, the RCS was borated to the shutdown margin required for hot shutdown conditions which exceeds the shutdown margin for cold shutdown conditions.

Cooldown was then commenced in parallel with continuing efforts to locate the leakage source. At 2118 during swing shift on September 29, 1983, charging flow was isolated by closing manual isolation valves S31208MU084 and S31208MU091 in accordance with an Abnormal Valve Lineup provided to the operating foremen by the Plant Superintendent. This abnormal lineup was developed as a progressive effort to locate the leakage source. At that time, RCS temperature was being held constant at about 480°F in order to measure the leak rate accurately.

At 0145 on September 30, 1983, as the leak rate check with these valves secured was being completed, the graveyard Shift Supervisor recognized that the shutting of S31208MU084 and S31208MU091 violated the Technical Specifications. Shutting of these valves isolated flow from the charging pumps to the RCS and was inconsistent with LCO's 3.1.2.2 (boration flow paths), 3.1.2.4 (charging pumps), and 3.5.2 (ECCS subsystems) during Mode 3 operation. He immediately ordered the valves to be opened. The valves were opened at 0157.

The cause of this event was personnel error in that the abnormal lineup was not reviewed to ensure that all Technical Specification requirements were met. The lineup was documented and reviewed in accordance with the Abnormal Valve Lineup section of Procedure S023-0-13, "Work Authorization." Although a revision to the Abnormal Valve Lineup Procedure, S023-0-36, "Control of System Alignments," had been issued on September 13, 1983, to more specifically call out the need to review abnormal lineups for compliance with all Technical Specification requirements, training in the revision to S023-0-36 had not yet been provided to the operating shifts and, consequently, the Abnormal Valve Lineup section of S023-0-13 had not been revised to refer to S023-0-36."

During the NRC inspection conducted between September 17 and October 28, 1983, the foregoing reported information was verified. In addition to the violation of regulatory requirements cited below, the inspection findings disclosed that (1) the plant engineering staff provided their work product to the operations group in an informal document without appropriate review and approval, and (2) operations management and licensed operators failed to follow recently issued administrative procedures specifically designed to preclude this type of event and failed to follow the superseded abnormal valve lineup procedure in S023-0-13. Notably, the abnormal valve lineup sheet was not signed by a licensed senior reactor operator. The inspectors concluded that these informal dealings contributed to the violations of regulatory requirements.

To emphasize the need for improvements in: (1) conducting licensed activity in accordance with established procedures, (2) the need for appropriate training to assure that licensed operators are fully cognizant and aware of pertinent regulatory requirements, and (3) the need for appropriate reviews and approval of engineering activities and recommendations, the Nuclear Regulatory Commission proposes to impose a civil penalty in the amount of Forty Thousand Dollars (\$40,000) for these matters.

In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL-96-295 and 10 CFR 2.205, the particular violations and the associated civil penalty are set forth below:

VIOLATIONS ASSESSED A CIVIL PENALTY

- A. Technical Specification 6.8.1 requires, in part, that written procedures shall be established, implemented and maintained covering specific activities including the applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978, and surveillance and test activities of safety-related equipment.

San Onofre Nuclear Generating Station Operating Instruction S023-0-36, Section 6.7, Control of System Alignments, provides instructions for altering system alignments when not specified in approved operating instructions. This procedure requires that such alignments be documented on a prescribed form and approved by both the SRO Operations Supervisor and the Shift Supervisor. Prior to approval, the individuals are required to evaluate the effect of an evolution against technical specification requirements.

Contrary to the above, when coolant charging system manual isolation valves (Nos. S31208MU084 and S31208MU091) were closed on September 29, 1983, Operating Instruction S023-0-36 was not implemented. Instead, the valve closures were made at the direction of the Shift Foreman who had been informally provided by the plant engineering and operations staff a list of valves to reposition to assure isolation of the chemical and volume control system in an attempt to locate and identify the source of apparent leakage from the reactor coolant system. The list of valves

provided to the operations personnel was unsigned, and was not otherwise reviewed or approved. Rather, the Shift Foreman simply directed the Nuclear Plant Equipment Operator to reposition the valves as shown on the list provided by the engineering group after the valve numbers had been transferred onto an abnormal valve lineup form contained in procedure S023-0-13. This procedure was superceded by procedure S023-0-36 on September 13, 1983. However, even this superceded procedure was not properly implemented in that the form was not signed by a licensed senior reactor operator as required.

- B. Technical Specification 3.5.2 requires, in part, that when the unit is in Mode 1, 2, or 3, two independent Emergency Core Cooling System (ECCS) subsystems shall be OPERABLE with each subsystem comprised of, among other things, one OPERABLE charging pump.

Technical Specification 3.1.2.2 requires that when the unit is in Mode 1, 2, 3, or 4, at least two of the following boron injection flow paths and one associated heat tracing circuit shall be OPERABLE:

- a. Flow paths from one or both boric acid makeup tanks via
1. The associated gravity feed connection(s) and/or
 2. The associated boric acid makeup pump(s) via charging pump(s) to the RCS

and/or

- b. The flow path from the refueling water storage tank via charging pump(s) to the Reactor Coolant System.

Technical Specification 3.1.2.4 requires that when the Unit is in Mode 1, 2, 3 or 4, at least two charging pumps shall be operable.

Technical Specification 3.0.3 requires, in part, that when a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour, action shall be initiated to place the unit in a MODE in which the specification does not apply.

Contrary to the above, when the coolant charging system manual isolation valves were shut on September 29, 1983, the charging system was isolated from the primary coolant system thereby violating Technical Specification 3.0.3 in that the Limiting Conditions for Operation for Technical Specification 3.5.2, Technical Specification 3.1.2.2, and Technical Specification 3.1.2.4 were not met, and action was not initiated within one hour to place the unit in a Mode in which the specification did not apply.

Collectively the above violations have been evaluated as a Severity Level III problem (Supplement I)

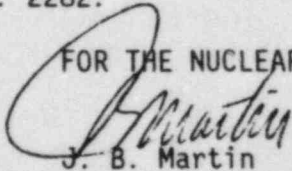
(Cumulative Civil Penalty - \$40,000 assessed equally between the violations.)

Pursuant to the provisions of 10 CFR 2.201, Southern California Edison Company is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, and a copy to the Regional Administrator, USNRC, Region V, within 30 days of the date of this Notice, a written statement or explanation, including: (1) admission or denial of the alleged violation; (2) the reasons 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. 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 California Edison Company may pay the civil penalty in the amount of \$40,000 or may protest imposition of the civil penalty in whole or in part by a written answer. Should the Southern California Edison Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalty in the amount proposed above. Should the Southern California Edison Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer 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 contained in Section IV (B) of 10 CFR Part 2, Appendix C 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 by specific reference (e.g., giving page and paragraph numbers) to avoid repetition. The Southern California Edison Company's attention 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 has been subsequently 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. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION

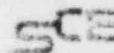


J. B. Martin

Regional Administrator

Dated at Walnut Creek, California
this 8 day of December 1983

Southern California Edison Company



P. O. BOX 800

2246 WALNUT GROVE AVENUE

ROSEMEAD, CALIFORNIA 91770

KENNETH P. BASKIN

VICE PRESIDENT

TELEPHONE

213-572-1401

January 6, 1984

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

Attention: Mr. R. C. DeYoung, Director

Dear Sir:

Subject: Docket No. 50-362
IE Inspection Reports 50-206/83-21, 50-361/83-33 and
50-362/83-31
Response to Notice of Violation
San Onofre Nuclear Generating Station, Unit 3

Reference: Letter, J. B. Martin (NRC) to C. B. McCarthy (SCE),
dated December 8, 1983

The referenced letter forwarded a Notice of Violation and Proposed Imposition of Civil Penalty based on inspections conducted by Messrs. A. E. Chaffee, J. P. Stewart and A. J. D'Angelo during the period of September 17 through October 28, 1983.

Pursuant to 10 CFR 2.201, the enclosed "Response to Notice of Violation (10 CFR 2.201)," to this letter provides the Southern California Edison Company (SCE) response to the Notice of Violation contained in the referenced letter. In addition to the five specific factors requested by the Notice of Violation, we have set forth a separate section (identified as Section 2) that provides the facts and circumstances surrounding the event.

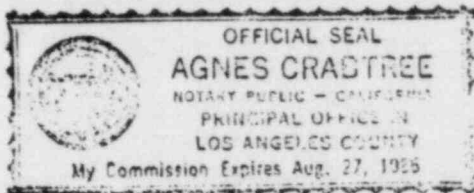
Also enclosed is a check in the amount of \$40,000 payable to the Treasurer of the United States, as called for by the Notice of Violation.

I trust the enclosed "Response to Notice of Violation (10 CFR 2.201)" responds adequately to all aspects of the violations. If you have any questions or if we can provide additional information, please so advise.

Subscribed on the 6th day of January 1984 by

Kenneth P. Baskin
KENNETH P. BASKIN
Vice President

Subscribed and sworn to before me this 6th day of January, 1984



- cc: J. B. Martin (USNRC Regional Administrator, Region V)
- A. E. Chaffee (USNRC Resident Inspector, Units 1, 2 and 3)
- J. P. Stewart (USNRC Resident Inspector, Units 2 and 3)
- A. J. D'Angelo (USNRC Resident Inspector, Unit 1)

ENCLOSURE

RESPONSE TO NOTICE OF VIOLATION (10CFR2.201)

In accordance with 10 CFR 2.201, this enclosure provides the Southern California Edison Company's (SCE) response to Notice of Violation contained in the enclosure to Mr. J. B. Martin's letter of December 8, 1983.

The enclosure to the December 8, 1983, letter states:

"A. Technical Specification 6.8.1 requires, in part, that written procedures shall be established, implemented and maintained covering specific activities including the applicable procedures recommended in Appendix 'A' of Regulatory Guide 1.33, Revision 2, February 1978, and surveillance and test activities of safety-related equipment.

"San Onofre Nuclear Generating Station Operating Instruction S023-0-36, Section 6.7, Control of System Alignments, provides instructions for altering system alignments when not specified in approved operating instructions. This procedure requires that such alignments be documented on a prescribed form and approved by both the SRO Operations Supervisor and the Shift Supervisor. Prior to approval, the individuals are required to evaluate the effect of an evolution against technical specification requirements.

"Contrary to the above, when coolant charging system manual isolation valves (Nos. S31208MU084 and S31208MU091) were closed on September 29, 1983, Operating Instruction S023-0-36 was not implemented. Instead, the valve closures were made at the direction of the Shift Foreman who had been informally provided by the plant engineering and operations staff a list of valves to reposition to assure isolation of the chemical and volume control system in an attempt to locate and identify the source of apparent leakage from the reactor coolant system. The list of valves provided to the operations personnel was unsigned, and was not otherwise reviewed or approved. Rather, the Shift Foreman simply directed the Nuclear Plant Equipment Operator to reposition the valves as shown on the list provided by the engineering group after the valve numbers had been transferred onto an abnormal valve lineup form contained in procedure S023-0-13. This procedure was superseded by procedure S023-0-36 on September 13, 1983. However, even this superseded procedure was not properly implemented in that the form was not signed by a licensed senior reactor operator as required.

"...This violation and the one below have been evaluated as a Severity Level III problem (Supplement I)."

1. ADMISSION OR DENIAL OF ALLEGED VIOLATION:

SCE admits that on September 29, 1983, at 2118, coolant charging system manual isolation valves S31208MU084 and S31208MU091 were closed in accordance with the Abnormal Valve Lineup section of Operating Instruction SO23-0-13, "Work Authorizations," rather than Operating Instruction SO23-0-36, "Control of System Alignment," which had been issued on September 13, 1983, as an improvement in the administrative control of abnormal valve lineups.

SCE admits that the valve closures were made at the direction of the Shift Foreman. This direction was also approved by the Plant Superintendent. The direction followed review of the abnormal valve lineup pursuant to the Abnormal Valve Lineup section of Procedure SO23-0-13, against both applicable P&ID's and administrative procedures. However, the review was not adequate in that it did not include all Technical Specification considerations.

SCE admits that the valve lineup list was informally provided to the Shift Foreman in that it was not transmitted by signed correspondence. The valve lineup list was, however, reviewed and approved by the Shift Foreman, as he later attested.

2. STATEMENT OF FACTS AND CIRCUMSTANCES:

The facts and circumstances surrounding this violation are as follows:

- a. On September 29, 1983, at 0629, with Unit 3 in Mode 1 at approximately 23% power, an RCS water inventory balance was completed in accordance with Procedure SO23-3-3.37. This surveillance indicated an unidentified leakage of 1.27 gpm, which exceeded the 1.0 gpm limit of Technical Specification Limiting Condition for Operation (LCO) 3.4.5.2. It was immediately recognized, however, that this surveillance had incorrectly omitted the inventory of coolant leaking to the Reactor Coolant Drain Tank (RCDT). This omission had the effect of making the identified leakage to the RCDT appear as unidentified leakage. Accordingly, it was concluded that the results of this surveillance were invalid and a second surveillance was commenced at 0645.

- b. At 0929, during the performance of the second surveillance, the RCS total leakage was determined to be 1.31 gpm with 1.19 gpm being unidentified leakage. The second surveillance was then terminated, since it was felt that the unidentified leakage after the 4 hour surveillance period would exceed the 1.0 gpm limit of LCO 3.4.5.2. At 0930, in accordance with LCO 3.4.5.2, Action Statement 'b', actions were immediately initiated to reduce the unidentified leakage to less than 1 gpm within 4 hours. In addition, an Unusual Event was declared in accordance with Emergency Plan Implementing Procedure SO23-VIII-1, and the NRC Operations Center was notified pursuant to 10 CFR 50.72.
- c. The necessary steps under Emergency Operating Instruction SO23-3-5.7 were immediately initiated and at 0946, the Chemical and Volume Control System (CVCS) was isolated by remote manual valves in the letdown line in accordance with this procedure and personnel were dispatched to the containment to search for the source of the leakage. At 1030, a leakage calculation, performed since CVCS was isolated, indicated that the leakage had not abated and was from the RCS. Charging and letdown flows were subsequently reinitiated. Personnel who had entered the containment reported that small leakages past fittings were found (on the order of 0.01 gpm) but none which could satisfactorily explain a leakage rate of approximately 1.0 gpm.
- d. Therefore, in accordance with LCO 3.4.5.2, Action Statement 'b', Unit 3 was placed in Mode 3 at 1205 on September 29, 1983. In preparation for continued cooldown, the RCS was then borated to the shutdown margin required for hot shutdown, which exceeds the shutdown margin for cold shutdown conditions. Cooldown was then commenced in parallel with continuing efforts to locate the leakage source.
- e. At 2118 during swing shift on September 29, 1983, charging flow was isolated by closing manual isolation valves S31208MU084 and S31208MU091 in accordance with an Abnormal Valve Lineup prepared from a list of valves provided to the Shift Foreman by the Plant Superintendent. The lineup was documented and reviewed in accordance with the Abnormal Valve Lineup Section of Procedure SO23-0-13, "Work Authorizations." Although a new Abnormal Valve Lineup Procedure, SO23-0-36, "Control of System Alignments," had been issued on September 13, 1983, to improve review of abnormal valve lineups relative to Technical Specification requirements, SO23-0-13 had not been revised with the issuance of SO23-0-36, training in the use of SO23-0-36 had not been

provided to operating shifts, and consequently SO23-0-13 was utilized for this abnormal valve lineup. Although our administrative processes can provide for a specified delay in the implementation date of procedures until training has been accomplished, in this case, our administrative process was not implemented to provide for a specified delay in revision of SO23-0-13 until training was accomplished on SO23-0-36.

- f. The abnormal valve lineup provided to the Shift Foreman had been developed as a progressive effort to locate the leakage source during an emergency. It was reviewed against applicable P&ID's and administrative procedures, and it was implemented at the direction of the Shift Foreman. However, signing of the Abnormal Valve Lineup, documenting the Shift Foreman's approval, was not accomplished until September 30, 1983, after the erroneous lineup was corrected.
- g. At 0145 on September 30, 1983, as the leak rate check with these valves secured was being completed, the graveyard Shift Supervisor recognized that the shutting of S31208MU084 and S31208MU091 violated the Technical Specifications. Shutting of these valves represented isolating flow from the charging pumps to the RCS and in Mode 3 is inconsistent with LCO's 3.1.2.2 (boration flow paths), 3.1.2.4 (charging pumps), and 3.5.2 (ECCS subsystems). He immediately ordered the valves to be opened. The valves were opened at 0157.

3. REASONS FOR THE VIOLATION:

The cause of this violation was personnel error in not reviewing the abnormal lineup relative to all Technical Specification requirements. Failure to perform an adequate review may have been contributed to by the fact that training in SO23-0-36 had not been provided and the Abnormal Valve Lineup Section of SO23-0-13 had not been revised with the issuance of SO23-0-36. However, the fundamental error was one of oversight by the personnel involved.

4. CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

Manual isolation valves S31208MU084 and S31208MU091 were opened at 0157 on September 30, 1983, restoring the charging system flow path consistent with LCO's 3.1.2.2 (boration flow paths), 3.1.2.4 (charging pumps) and 3.5.2 (ECCS subsystems).

Procedure SO23-0-13, Revision 10, was modified by Temporary Change Notice (TCN) 10-14 on September 30, 1983, to refer users of this procedure to Procedure SO23-0-36 when performing abnormal system alignments. Special training in the use of Procedure SO23-0-36 was completed at shift briefings for all affected Operations personnel on November 4, 1983.

Additional training in the use of administrative procedures including SO23-0-36 was included in the operator requalification program completed on December 9, 1983. This training included, but was not limited to, operating personnel responsibilities and authority, recordkeeping, and control of systems and work. It emphasized adherence to administrative procedures and thoroughness of reviews relative to Technical Specification requirements. This training was overseen by a special Management and Operations Task Force set up specifically for that purpose.

Additionally, appropriate disciplinary action has been taken for individuals involved.

5. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

Simulator training for operators will be modified to include plant situations requiring prompt action while remaining in compliance with administrative procedures and formal communication requirements. Operator training in the use of administrative procedures is being enhanced and will be made more comprehensive.

The need for management oversight and direction during abnormal circumstances had been recognized prior to the Unusual Event of September 29, 1983. Although it was intended that such coverage be maintained throughout this Unusual Event, such coverage was not provided as planned. Consequently, the program to provide such coverage has been formalized. This coverage will be provided by operations management to oversee the pace and direction of activities and to ensure that good interdisciplinary communications are maintained.

Additionally, Shift Technical Advisor approval of abnormal valve lineups, in addition to approval by two SRO's, is now required by procedure to provide a more thorough review of Abnormal Valve Lineups relative to Technical Specification requirements.

6. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved on September 30, 1983, with the restoration of the charging system valve lineup and the issuance of the change to Operating Instruction SO23-0-13.

The enclosure to the December 8, 1983, letter states:

"B. Technical Specification 3.5.2 requires, in part that when the unit is in Mode 1, 2 or 3, two independent Emergency Core Cooling Systems (ECCS) subsystems shall be OPERABLE with each subsystem comprising of, among other things, one OPERABLE charging pump.

"Technical Specification 3.1.2.2 requires that when the unit is in Mode 1, 2, 3 or 4 at least two of the following boron injection flow paths and one associated heat tracing circuit shall be OPERABLE:

"a. Flow paths from one or both boric acid makeup tanks via

1. The associated gravity feed connection(s) and/or
2. The associated boric acid makeup pump(s) via charging pump(s) to the RCS

and/or

"b. The flow path from the refueling water storage tank via charging pump(s) to the Reactor Coolant System.

"Technical Specification 3.1.2.4 requires that when the unit is in Mode 1, 2, 3 or 4, at least two charging pumps shall be operable.

"Technical Specification 3.0.3 requires, in part, that when a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour, action shall be initiated to place the unit in a MODE in which the specification does not apply.

"Contrary to the above, when the coolant charging system manual isolation valves were shut on September 29, 1983, the charging system was isolated from the primary coolant system thereby violating Technical Specification 3.0.3 in that the Limiting Conditions for Operation for Technical Specification 3.5.2, Technical Specification 3.1.2.2, and Technical Specification 3.1.2.4 were not met, and action was not initiated within one hour to place the unit in a mode in which the specification did not apply.

"Collectively the above violations have been evaluated as a Severity Level III problem (Supplement I) (Cumulative Civil Penalty - \$40,000 assessed equally between the violations.)"

1. ADMISSION OR DENIAL OF ALLEGED VIOLATION:

SCE admits that on September 29, 1983, the charging system was isolated from the primary coolant system thereby violating Technical Specification 3.0.3 in that the Limiting Conditions for Operation for Technical Specification 3.5.2, Technical Specification 3.1.2.2 and Technical Specification 3.1.2.4 were not met, and, since operators were unaware the abnormal valve lineup thus violated the Technical Specifications, action was not initiated within one hour to place the unit in a mode which the specification did not apply.

2. STATEMENT OF FACTS AND CIRCUMSTANCES:

See Section A.2 above.

3. REASONS FOR THE VIOLATION:

This violation was also caused by the personnel error discussed in Section A.3, above.

4. CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

See Section A.4 above.

5. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

See Section A.5 above.

6. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

See Section A.6 above.

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



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

Docket/License: 50-334/DPR-66 JAN 0 6 1984
EA 83-131

Duquesne Light Company
ATTN: Mr. J. J. Carey
 Vice President
 Nuclear Division
Post Office Box 4
Shippingport, Pennsylvania 15077

Gentlemen:

Subject: Enforcement Conference 50-334/83-27

On October 11, 1983, an Enforcement Conference was held with you and members of your staff at the NRC Region I Office to review the circumstances associated with apparent violations of NRC requirements which occurred at the Beaver Valley Power Station, Unit 1. The violations were reviewed during NRC inspections conducted August 16 - September 12, 1983 and September 22-23, 1983. The reports of these inspections were sent to you on October 3, 1983. At the Enforcement Conference the causes of the violations and your corrective actions were discussed. The report of the Enforcement Conference is enclosed.

The violations of NRC requirements which are described in the enclosed Notice involved (1) an increase in reactor coolant temperature from 90 F to 180 F while the reactor was shutdown, caused by an inoperable Residual Heat Removal (RHR) System, and (2) an inoperable river water pump while the reactor was in Mode 3. These violations are of serious concern because they demonstrate inadequate attention to duty on two separate occasions by several members of your operations staff, including licensed nuclear operators and shift supervision. Specifically, several administrative and managerial control procedures designed to preclude or, as a minimum, promptly detect system inoperability, were not properly implemented. Further, these conditions were not promptly recognized by the operating staff. The first condition was not recognized until after the increased temperature caused a water volume expansion and overflow of water at the reactor vessel flange. The second condition was not recognized until identified by the NRC inspector during a backshift tour of the control room. These violations have been classified in the aggregate as a Severity Level III problem in accordance with the NRC Enforcement Policy, 10 CFR 2, Appendix C.

Such performance by NRC licensed personnel is below that which is expected. Normally, a civil penalty is proposed for a Severity Level III violation or problem. However, in recognition of your comprehensive corrective actions, I have decided, after consultation with the Director, Office of Inspection and Enforcement, not to propose a civil penalty in this case. Similar violations in the future may result in additional enforcement action.

Duquesne Light Company

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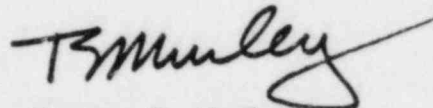
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You are required to respond to the enclosed Notice, and you should follow the instructions specified therein in preparing your response. In your response, you should specify the corrective actions taken or planned, as described at the enforcement conference, and the current status of each action.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosures will be placed in the NRC Public Document Room unless you notify this office, by telephone, within ten days of the date of this letter and submit written application to withhold information contained therein within thirty days of the date of this letter. Such application must be consistent with the requirements of 10 CFR 2.790(b)(1). The telephone notification of your intent to request withholding, or any request for an extension of the 10 day period which you believe necessary, should be made to the Supervisor, Files, Mail and Records, USNRC Region I, at (215) 337-5223.

Your cooperation with us is appreciated.

Sincerely,



Thomas E. Murley
Regional Administrator

Enclosures:

1. Notice of Violation
2. NRC Region I Enforcement Conference
Report 50-334/83-27

NOTICE OF VIOLATION

Duquesne Light Company
Beaver Valley, Unit 1

Docket No. 50-334
License No. DPR-66

During inspections conducted on August 16 - September 12 and September 22-23, 1983, violations of NRC requirements were identified. The first violation involved an unplanned increase of average reactor coolant temperature to 180 F which occurred in the refueling mode because the Residual Heat Removal (RHR) System was inoperable. The violation occurred because of a deficiency in an established operations surveillance test (OST) procedure. Specifically, OST 1.1.5(6), Containment Isolation Trip Test, was inadequate in that although it stated that heat loads of the Component Cooling Water System (CCRS) should be minimized by shutting off all systems cooled by the CCRS that can be shut off before the test, the procedure did not indicate which specific systems could be isolated with associated limitations, nor did it indicate that those systems cooled by CCRS should be restored upon completion of the tests. As a result, the Residual Heat Removal System, which is cooled by CCRS, was rendered inoperable for an excessive period of time.

The second violation involved several examples of failure to follow procedures which resulted in one of two redundant reactor plant river water subsystems being inoperable, although not in excess of the time specified in the technical specification limiting condition for operation (LCO) action statement.

These violations have been categorized in the aggregate as a Severity Level III problem. Normally, a civil penalty is proposed for a Severity Level III problem. However, a civil penalty is not proposed in this case because of the comprehensive corrective actions taken.

In accordance with NRC Enforcement Policy, 10 CFR 2, Appendix C, published in the Federal Register on March 9, 1982 (47 FR 9987), the violations are set forth below:

- A. Technical Specification 1.4 and Table 1.1 defines operations modes, and specifically defines Mode 6 (Refueling) as a condition existing when the reactor vessel head is unbolted or removed with fuel in the vessel. In this mode the average reactor coolant temperature is required to be less than or equal to 140 F.

Contrary to the above, on September 5, 1983, while the reactor was in a re-fueling mode since the vessel head was unbolted, the average reactor coolant temperature exceeded 140 F and reached a maximum of 180 F.

- B. Technical Specification 6.8.1 requires, in part, written procedures be established, implemented, and maintained covering the applicable procedures referenced in Appendix "A" of Regulatory Guide 1.33, November, 1972. Section 3 of Appendix A specifies the need for procedures for activities involving startup, operation, or shutdown of safety-related systems. Section 1 of Appendix A specifies the need for procedures for equipment control, shift and relief turnovers, and log entries.

OM Chapter 1.30.3, River Water Systems - Normal Systems Arrangement, and OM Chapter 1.30.4M, Standby Reactor Plant River Water Pump Startup, specify the operational steps necessary to put the 1C river water pump, an Engineered Safeguards Feature (ESF), in standby service whenever the 1A or 1B pump (also ESF components) is taken out of service, including electrical connection to the appropriate emergency bus (1AE or 1DF).

Station Administrative Procedures, Chapter 4, Plant Operations Group, and BVPS OM Chapter 1.48, Conduct of Operations, requires certain administrative controls be implemented when working on ESF systems or components.

Contrary to the above, on September 22, 1983, the 1C river water pump was not put into standby service by electrical connection to the 1AE emergency bus after the 1A river water pump was declared inoperable. The failure to follow certain administrative controls, as specified in Chapter 4 of the Station Administrative Procedures (SAP) and BVPS OM Chapter 1.48, contributed to this violation, as evidenced below.

1. Section VI.P of the SAP requires an Emergency Safeguards Equipment Checklist to be prepared prior to removing an ESF system or component from service when in Modes 1 thru 4.

However, an Emergency Safeguards Equipment Checklist was not prepared prior to removing 1A river water pump, an ESF component, from service on September 22, 1983, while in Mode 3.

2. Section 5.E.2 of OM 1.48 requires when an ESF system or component is removed from service, the Systems Level Status Board, ESF Valve Status Boards, and Station Equipment Status Board be updated to reflect current system alignment when in Modes 1 thru 4. Similarly, Section VI.P.2 of SAP requires control room prints to be updated.

However, when the 1A river water pump was removed from service on September 22, 1983 when in Mode 3, the Systems Level Status Board, ESF Valve Board, Station Equipment Status Board, and control room prints were not updated to reflect the current system alignment.

3. Section 8.B of OM 1.48 requires changes in plant status to be logged in the Shift Operating Report and the Nuclear Control Operator's Log.

However, when plant status was changed on September 22, 1983 because of removal of the 1A river water pump and as a consequence one river water subsystem from service, this change was not logged in the Shift Operating Report nor in the Nuclear Control Operator's Log.

4. Section IV.A of the SAP requires operations personnel, during shift turnover and relief activities, to review logs and control room instrumentation to determine the current status of systems and equipment important to safe operation.

However, on the 4:00 p.m. shift turnover and relief on September 22, 1983, operations personnel did not adequately review logs and control room instrumentation to determine current status of systems and equipment important to safe operation in that they did not recognize that a second river water subsystem was not in service.

5. Operating Surveillance Test 1.48.3, Control Board Checklist, requires the Shift Technical Advisor to perform an independent verification of the status of key safety related components during the shift turnover while in Modes 1 thru 3.

However, the Shift Technical Advisor, during an independent verification of the status of key safety related components during shift turnover while in Mode 3 on September 22, 1983, failed to note the abnormal condition of two river water pumps in the Pull-To-Lock position although this was specifically included on the Control Board Checklist.

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

Pursuant to the provisions of 10 CFR 2.201, Duquesne Light Company is hereby required to submit to this office within 30 days of the date of the letter transmitting this Notice, a written statement or explanation in reply, including for each violation: (1) the corrective steps which have been taken and the results achieved; (2) the corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
831 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

February 27, 1984

Docket No. 50-309
License No. DPR-36
EA No. 84-3

Maine Yankee Atomic Power Company
ATTN: Mr. J. B. Randazza
Vice President
Nuclear Operations
83 Edison Drive
Augusta, Maine 04336

Gentlemen:

Subject: Notice of Violation (Inspection Report No. 50-309/83-18)

On November 3, 1983, an Enforcement Conference was held with you and members of your staff at the NRC Region I Office to review the circumstances associated with the compromise of containment integrity which occurred at the Maine Yankee Atomic Power Station, Unit 1, on five separate occasions between October 12 -14, 1983. The compromise of containment integrity was reviewed during an NRC inspection conducted on October 17 - 18, 1983. The report of the inspection was sent to you on October 28, 1983. At the Enforcement Conference the causes of the violation and your corrective actions were discussed.

The compromise of containment integrity involved the opening, on five separate occasions, of an inner containment personnel air lock door even though the outer door was inoperable and unable to perform its containment integrity function because of excessive leakage. This leakage was observed during a Type B test of the area between the doors after a modification had been performed on the outer door. Although this condition existed, the plant staff did not immediately initiate the remedial actions. Prudent actions would have included measures to assure that the inner door was not opened until the outer door was repaired and retested. Nonetheless, such actions were not taken.

Although it was fortuitous that the periods of time the inner door was opened was not in excess of the technical specification limiting condition for operation action statement, the NRC is very concerned that the outer door was not immediately declared inoperable once the excessive leakage was observed, and containment entries were allowed to be made. Notwithstanding the fact that the procedure did not specify the remedial actions that should be taken upon completion of a Type B test, the performance of several plant personnel, including senior on-site management and senior licensed operators, demonstrated a serious lack of control of plant conditions in allowing such occurrences. Such performance is below that expected by the NRC.

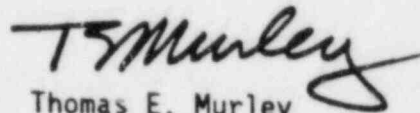
This violation has been classified at Severity Level III in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C). Normally, a civil penalty is proposed for a Severity Level III violation. However, a civil penalty will not be proposed in this case because the violation was promptly reported to the NRC when identified, and your corrective actions were prompt and comprehensive,

particularly the strong measures taken to reinforce the need for personnel accountability. Nonetheless, similar violations in the future may result in additional enforcement action. You are required to respond to the enclosed Notice, and you should follow the instructions specified therein in preparing your response.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room unless you notify this office, by telephone, within ten days of the date of this letter and submit written application to withhold information contained therein within thirty days of the date of this letter. Such application must be consistent with the requirements of 10 CFR 2.790(b)(1). The telephone notification of your intent to request withholding, or any request for an extension of the 10 day period which you believe necessary, should be made to the Supervisor, Files, Mail and Records, USNRC Region I, at (215) 337-5223.

The responses directed by this letter and the enclosure 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,


Thomas E. Murley
Regional Administrator

Enclosure:
Notice of Violation

NOTICE OF VIOLATION

Maine Yankee Atomic Power Company
Maine Yankee Atomic Power Station, Unit 1

Docket No. 50-309
License No. DPR-36
EA No. 84-3

On October 12, 1983, a routine surveillance test of the containment personnel air lock was performed at Maine Yankee. Although this test failed because of seal leakage on the air lock outer door, the door was not declared inoperable until October 14, 1983. During those two days, the reactor was at 100% power, and the inner door was opened five times, each time causing a compromise of containment integrity.

On October 16 - 17, 1983, the NRC conducted an inspection to review the circumstances associated with this compromise of containment integrity. The leakage on the outer door occurred after a plant design change to the "O" ring grooves, although the change apparently did not result in the leakage. Rather, the leakage was apparently caused by wear of brass shims within the locking ring.

At the end of each day that work was performed on the "O" ring grooves, an operational seal leakage test was performed involving pressure testing the area between the "O" rings. Each time the test passed successfully. The door was able to pass this operational test between the two "O" rings, yet fail the Type B leak rate test because wear of the brass shims allowed excessive movement of the door during the Type B test. The operational seal leakage test does not exert the same pressure on the door.

After the Type B surveillance test failed on October 12, 1983, when air was discovered leaking from the vicinity of the air lock door, the plant shift supervisor (PSS) was informed of the test results. The PSS did not declare the door inoperable but rather required an operational seal leak test (the test between the "O" rings) be performed. This test passed acceptance criteria. At the same time, the PSS directed a deficiency report be generated for repair of the outer door, and he reported this information to the PSS who relieved him on duty. However, maintenance work did not begin on the door until October 14, 1983. Plant operators continued to believe the outer air lock door was operable based on the test between the "O" rings. When the PSS who had originally witnessed the field surveillance test conducted on October 12, 1983, returned to on-shift duties on October 14, 1983, he became concerned about containment integrity and discussed the subject with the shift engineer. At that time, they recognized that a problem existed and (1) tagged the inner containment air lock door to prevent further compromises of containment integrity and (2) notified the NRC of a violation of containment integrity.

This violation has been categorized at Severity Level III. Normally, a civil penalty is proposed for a Severity Level III violation. However, a civil penalty is not proposed in this case because (1) the violation was promptly reported to the NRC when identified; and (2) appropriate corrective actions were taken.

In accordance with the NRC Enforcement Policy 10 CFR Part 2, Appendix C, the violation is set forth below:

10 CFR 50, Appendix B, Criterion XVI, requires in part, that measures shall be established to assure that significant conditions adverse to quality, such as failures and malfunctions are promptly identified and corrected.

Contrary to the above, between October 12-14, 1983, a significant condition adverse to quality existed, and this condition was not promptly identified and corrected until October 14, 1983. Specifically, the condition involved containment integrity being compromised when individuals entered containment on five occasions through the inner hatch of the personnel airlock when the outer hatch was not operable (the outer hatch failed a surveillance test due to excess leakage).

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

Pursuant to the provisions of 10 CFR 2.201, Maine Yankee Atomic Power Company is required to submit to this office within 30 days of the date of the letter transmitting this Notice, a written statement or explanation in reply, including for each violation: (1) the corrective steps which have been taken and the results achieved; (2) the corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGULATORY
430 ROCKEFELLER PLAZA
GLEN ELLYN, ILLINOIS 60137

MAR 27 1984

Docket No. 50-282
EA 83-143

Northern States Power Company
ATTN: Mr. C. E. Larson
Director of Nuclear
Generation
414 Nicollet Mall
Minneapolis, MN 55401

Gentlemen:

This refers to the special safety inspection conducted by Messrs. J. E. Hard and P. L. Hartmann of this office during the period November 18 through December 7, 1983, of activities at the Prairie Island Nuclear Generating Plant authorized by NRC Operating License No. DPR-42. This special inspection concerned the circumstances surrounding reduced offsite power supplies to an Engineered Safety Features auxiliary supply bus that occurred and was corrected by you on November 17, 1983. The results of this inspection were discussed on December 7, 1983, during an enforcement conference held in your corporate offices between Messrs. D. W. McCarthy, D. E. Gilberts, yourself, and other NSP personnel, and Mr. A. B. Davis and other members of the NRC staff.

The inspection revealed that on November 17, 1983 you discovered that during the time the Unit 1 Diesel Generator was out of service, Bus Tie Breaker No. 8 between ESF Auxiliary Supply Bus 15 and 4.16kv Unit 2 Bus 26 was racked out. This reduced the number of paths from the transmission grid to safety Bus 15 to only one. Since this condition existed for about 8 hours while the plant was in operation, you violated a Technical Specification Limiting Condition for Operation (LCO).

This violation has been categorized as a Severity Level III violation as described in the General Policy and Procedure for NRC Enforcement Actions 10 CFR Part 2, Appendix C. This Severity Level III violation involved a Technical Specification Limiting Condition for Operation (LCO) being exceeded where the appropriate Action Statement was not satisfied that resulted in a degraded condition; and sufficient information existed which should have alerted the licensee that it was in an Action Statement Condition. Sufficient information in this case was the availability of system procedures which provide the proper configuration for the electrical system and the opportunity for more than one operator to recognize the violation. In addition, administrative controls that are designed to provide added reviews when critical work is performed were not adequately implemented. The base value of Civil Penalty for a Severity Level III violation is \$40,000. However, a review of your performance history

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

MAR 16 1984

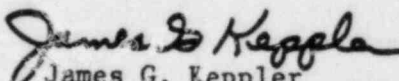
in this general area of concern did not reveal similar problems, and your overall performance as evidenced by the Systematic Assessments of Licensee Performance has been good. For these reasons the base civil penalty can be mitigated 100%. After consultation with the Director of the Office of Inspection and Enforcement, I have determined that no civil penalty is warranted here and I have been authorized to issue the enclosed Notice of Violation.

You are required to respond to the enclosed Notice of Violation and should follow the instruction in the Notice when preparing your response. In addition to your response to the specific violation, your response to the enclosed Notice should address corrective actions you have taken or planned to improve your management effectiveness in ensuring that Technical Specification requirements are met and that personnel performing safety-related activities are properly trained. Your written reply to this letter and the results of future inspections will be considered in determining whether further enforcement actions are 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 enclosures 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 procedure of the Office of Management and Budget as required by the Paperwork Reduction Action of 1980, PL 96-511.

Sincerely,


James G. Keppler
Regional Administrator

Enclosure: Notice of
Violation and Proposed
Imposition of Civil Penalty

cc w/encl:

E. L. Watzl, Plant Manager
DMB/Document Control Desk (RIBS)
Resident Inspector, RIII Prairie
Island
Resident Inspector, RIII Monticello
John W. Ferman, Ph.D.,
Nuclear Engineer, MPCA
Enforcement Coordinators
RI, RII, RIV and RV

NOTICE OF VIOLATION

Northern States Power Company
Prairie Island Nuclear Generating Plant
Unit 1

Docket No. 50-282
License No. DPR-42
EA 83-143

A special inspection was conducted by Messers. J. E. Hard and P. L. Hartmann of this office during the period November 18 through December 7, 1983. This special inspection concerned the circumstances surrounding reduced offsite power supplies to an Emergency Safety Features auxiliary supply bus. On November 17, 1983, the licensee discovered that during the time that the Unit 1 diesel generator was out of service, Bus Tie Breaker No. 8 between ESF Auxiliary Supply Bus 15 and 4.16kv Unit 2 Bus 26 was racked out. This reduced the number of paths from the transmission grid to safety Bus 15 to only one. Since this condition existed for about 8 hours while the plant was in operation, the licensee violated a Technical Specification Limiting Condition for Operation (LCO).

As a result of this inspection and in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C the following violation was identified.

Technical Specification 3.7.A.1 and A.5 state, in part, "A reactor shall not be made or maintained critical nor shall it be heated or maintained above 200°F unless all of the following requirements are satisfied for the applicable unit...at least two separate paths from the transmission grid to the plant 4.16kv safety buses...both diesel generators are operable..."

Technical Specification 3.7.B.2 states, in part, "A reactor shall be placed in the cold shutdown condition if the requirements of Specification TS.3.7.A cease to be satisfied. During startup operation or power operation, any of the following conditions of inoperability may exist for the times specified provided startup operation is discontinued until operability is restored.... One diesel generator may be out of service for a period not to exceed seven days (total for both diesel generators during any consecutive 30 day period) provided (a) the operability of the other diesel generator and its associated diesel driven cooling water pump are demonstrated immediately and at least once every 24 hours thereafter, (b) all engineered safety features are operable, and (c) both paths from the grid to the plant 4.16kv bus are operable."


Contrary to the above, on November 17, 1983, while the reactor was critical and above 200°F, the licensee racked out Bus Tie Breaker No. 8 between ESF Auxiliary Supply Bus 15 and 4.16kv Unit 2, Bus 26, thus reducing the paths from the grid to the plant 4.16kv bus to one while the diesel generator associated with Bus 15 was unavailable.

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

MAR 30 1984

Pursuant to the provisions of 10 CFR 2.201, Northern States Power Company is hereby required to submit to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of this Notice a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons 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. 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.

FOR THE NUCLEAR REGULATORY COMMISSION


James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 30 day of March 1984



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

MAR 14 1984

Docket No. 50-546
50-547
EA 84-1

Public Service Company of Indiana
ATTN: Mr. S. W. Shields
Senior Vice President
Nuclear Division
Post Office Box 190
New Washington, IN 47162

Gentlemen:

This letter and the attached Notice of Violation are based upon the decision of the Department of Labor (DOL) that Melbert J. Landers, a Quality Control Inspector assigned to Commonwealth-Lord Joint Venture (CLJV), the electrical contractor at the Marble Hill Nuclear Generating Station, was terminated on January 20, 1983 for the exercise of activities protected under Section 210 of the Energy Reorganization Act of 1974, as amended (42 U.S.C. 5851(a)). See Decision and Order, dated May 11, 1983, in DOL Case No. 83-ERA-5, as affirmed by the Decision and Final Order of the Secretary of Labor, dated September 9, 1983.

This action by a contractor of yours constitutes a violation of both 10 CFR 50.7 and Criterion I of Appendix B to 10 CFR Part 50. Criterion I requires that construction permit holders establish and execute a quality assurance program such that persons and organizations performing quality assurance functions have sufficient authority and organizational freedom: (1) to identify quality problems; (2) to initiate, recommend, or provide solutions; and (3) to verify implementation of solutions. Although the work of establishing and executing this program may be delegated to others, the construction permit holder retains the responsibility for the program.

This violation has been classified at Severity Level III in accordance with the General Policy and Procedure for NRC Enforcement Actions (10 CFR Part 2, Appendix C). It is considered to be a significant violation because the NRC has determined that QA/QC personnel should not be deterred or discouraged from vigorously implementing the QA program. A civil penalty is generally proposed for Severity Level III violations; however, because of your recent decision to discontinue construction of the Marble Hill Nuclear Generating Station, we have decided that no useful purpose would be served in proposing a civil penalty in this case. In addition, you are not required to respond to the Notice of Violation at this time. Should you, at some time in the future, resume construction of the Marble Hill plant, we would expect you to file a response to this Notice of Violation.

CERTIFIED MAIL RETURN
RECEIPT REQUESTED

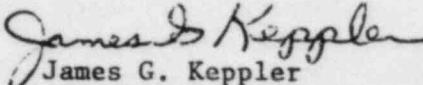
MAR 14 1984

Public Service Company of Indiana 2

In accordance with 10 CFR 2.790, a copy of this letter and the enclosure will be placed in the NRC Public Document Room.

We will gladly discuss any questions you have concerning this Notice.

Sincerely,


James G. Keppler
Regional Administrator

Enclosure: Notice
of Violation

NOTICE OF VIOLATION

Public Service Company of Indiana
Marble Hill Nuclear Generating Station
Units 1 and 2

Docket Nos: STN 50-546
STN 50-547
Permit Nos: CPPR-170
CPPR-171
EA 84-1

Based on the results of an investigation and hearing conducted by the Department of Labor (DOL Case 83-ERA-5) and the resulting Decision and Final Order of the Secretary of Labor dated September 9, 1983 (Attachment 1), affirming the Decision and Order of a DOL Administrative Law Judge dated May 11, 1983 (Attachment 2), in the case of Melbert J. Landers, the NRC has determined that a significant violation of its regulations has occurred. Specifically, DOL determined that Mr. Landers was discharged by a contractor of the licensee for making complaints about the quality of work being performed at the Marble Hill facility including filing nonconformance reports on January 4, 7, 10, and 14, 1983. To emphasize the need for a construction permit holder to assure that the quality assurance program is being properly executed, the NRC would generally propose the imposition of a civil penalty for the violation set forth in this Notice. However, because of the licensee's recent decision to discontinue construction of the Marble Hill Nuclear Generating Station, it has been concluded that no useful purpose would be served in proposing a civil penalty in this case. In accordance with the General Policy and Procedure for NRC Enforcement Actions (10 CFR Part 2, Appendix C), the particular violation is set forth below:

10 CFR 50.7(a) states in part that discrimination by a Commission licensee or a contractor or subcontractor of a Commission licensee against an employee for engaging in certain protected activities is prohibited. Discrimination includes discharge and other actions that relate to compensation, terms, conditions, and privileges of employment. The protected activities include complaints about the quality of work being performed and filing nonconformance reports.

10 CFR Part 50, Appendix B, Criterion I, states in part that construction permit holders are responsible for the establishment and execution of a quality assurance program. The construction permit holder may delegate to others, such as contractors, the work of establishing and executing the quality assurance program, or any part thereof, but shall retain responsibility therefore. The persons and organizations performing quality assurance functions shall have sufficient authority and organizational freedom to identify quality problems, to initiate, recommend, or provide solutions, and to verify implementation of the solutions.

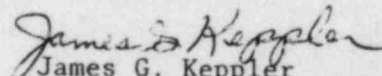
MAR 14 1984

Contrary to the above, Commonwealth-Lord Joint Venture (CLJV), a contractor delegated quality assurance functions by the licensee, discharged Melbert J. Landers, a Quality Control Inspector, on January 20, 1983, for making complaints about the quality of work being performed at the Marble Hill facility including filing nonconformance reports on January 4, 7, 10, and 14, 1983.

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

In view of your decision to discontinue construction of the Marble Hill plant you are not required at this time to submit a response under 10 CFR 2.201 to this Notice of Violation. Should you, at some future time, decide to resume construction of the Marble Hill plant, we would then expect you to submit to the Regional Administrator, USNRC, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, a written statement or explanation, including for the alleged violation: (1) admission or denial of the alleged violation; (2) the reasons 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. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation. Your written statement would be submitted within 30 days of your notification to the Commission of your intent to resume construction.

FOR THE NUCLEAR REGULATORY COMMISSION


James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 14th day of March 1984



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

FEB 1 1984

Docket No. 50-271
License No. DPR-28
EA 83-141

Vermont Yankee Nuclear Power Corporation
ATTN: Mr. Warren P. Murphy
Vice President and Manager
of Operations
RD 5, Box 169
Ferry Road
Brattleboro, Vermont 05301

Gentlemen:

Subject: Inspection No. 50-271/83-30

This refers to the inspection conducted on September 12, 1983 by a representative of the State of Nevada, Department of Human Resources. During that inspection, a violation of NRC and Department of Transportation requirements was identified. This also refers to the special safety inspection conducted on August 23, 1983 by Mr. J. Johnson, Senior Resident Inspector at the Pilgrim Nuclear Power Station, to review the circumstances associated with another violation of transportation regulations involving a shipment from your facility to Pilgrim.

On November 22, 1983, an enforcement conference was held with you and members of your staff during which these violations, their causes, and your corrective actions were discussed. Both violations are described in the enclosed Notice.

The first violation which is described in the enclosed Notice was identified by a representative of the State of Nevada, Department of Human Resources, when a radiation survey of a package shipped from Vermont Yankee to Beatty, Nevada, indicated dose rates in excess of regulatory limits. This violation is classified at Severity Level III in accordance with the NRC Enforcement Policy. Enforcement action was taken by the State of Nevada in the form of a temporary suspension of your burial permit. Therefore, a civil penalty is not proposed for this violation.

The second violation involved the shipment of contaminated blade guides from Vermont Yankee to the Pilgrim Nuclear Station in a package (plywood container) that was not strong and tight. As a result, contamination apparently leaked through the seams of the package and caused contamination levels on the surface of the package and the bed of the trailer in the area where the package was located. This violation has been classified at Severity Level IV.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

FEB 1 1984

Vermont Yankee Nuclear
Power Corporation

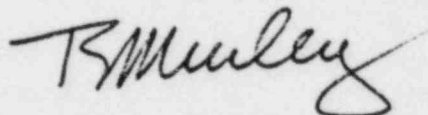
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You are required to respond to the enclosed Notice and, in preparing your response, you should follow the instructions described therein. In your response, you should describe in detail the specific corrective actions taken or planned to prevent recurrence of violations of this type.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosures will be placed in the NRC Public Document Room.

The responses directed by this letter and the accompanying 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,



Thomas E. Murley
Regional Administrator

Enclosure:
Notice of Violation

NOTICE OF VIOLATION

Vermont Yankee Nuclear Power Corporation
Vermont Yankee Nuclear Power Station

Docket No. 50-271
License No. DPR-28
EA No. 83-141

On September 12, 1983, a violation of NRC requirements was identified by a representative of the State of Nevada, Department of Human Resources, during an inspection at the Beatty, Nevada, burial site. The violation involved radiation levels in excess of regulatory limits on the external surface of a transported package.

On August 23, 1983, the NRC performed an inspection at the Pilgrim Nuclear Power Station to review the circumstances associated with the shipment to Pilgrim by the Vermont Yankee Nuclear Power Station of a package which was not strong and tight. Contamination apparently leaked from the package and caused excessive contamination levels on the surface of the package and the bed of the trailer in the area where the package was located. This constitutes a violation of NRC requirements.

In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, these particular violations are set forth below:

- A. 10 CFR 71.5 prohibits delivery of licensed material to a carrier for transport unless the licensee complies with applicable regulations of the Department of Transportation in 49 CFR Parts 170-189. 49 CFR 173.441(a) requires that each package of radioactive materials offered for transportation shall be designed and prepared for shipment so that under conditions normally incident to transportation, the radiation level does not exceed 200 millirem per hour at any point on the external surface of the package.

Contrary to the above, on September 1, 1983, the licensee delivered for shipment to the Beatty, Nevada, burial site, 7.2 curies of licensed material in the form of spent resin, and upon receipt at the Beatty, Nevada, burial site on September 12, 1983, the radiation level on the external surface of the package was determined to be 250 millirems per hour.

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

- B. 10 CFR 71.5 prohibits delivery of licensed material to a carrier for transport unless the licensee complies with applicable regulations of the Department of Transportation in 49 CFR Parts 170-189. 49 CFR 173.425(b)(1) requires that low specific activity materials must be packaged in strong, tight packages so that there will be no leakage of radioactive materials under conditions normally incident to transportation.

Contrary to the above, on August 23, 1983, the licensee delivered to a carrier for transport 47.93 millicuries of low specific activity licensed material in a package that was not strong and tight in that radioactive material leaked from the package onto its external surface and onto the bed of the trailer (a closed exclusive use vehicle) as it was being transported to Plymouth, Massachusetts.

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

Pursuant to 10 CFR 2.201, the Vermont Yankee Nuclear Power Corporation is hereby required to submit to this office within 30 days of the date of the letter transmitting this Notice, a written statement or explanation including for each alleged violation (1) admission or denial of the alleged violation; (2) the reasons 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. Consideration may be given to extending the response time for good cause shown.

II.A. MATERIALS LICENSEES, CIVIL PENALTIES AND ORDERS



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

December 19, 1983

Docket No. 30-14700
License No. 07-01173-03
EA No. 83-121

Lehigh Testing Laboratories, Inc.
c/o Massachusetts Materials Research, Inc.
ATTN: David Krashes, Ph.D.
Chief Executive Officer
241 West Boylston Street
West Boylston, Massachusetts 01583

Gentlemen:

Subject: Notice of Violation and Proposed Imposition of Civil Penalty (NRC
Inspection 83-01)

This refers to the NRC special safety inspection conducted at your facility in Wilmington, Delaware, on July 7, 8, 20, 21, 27, and 28, and August 11, 1983, of activities authorized by NRC License No. 07-01173-03. The report of this inspection was forwarded to you on September 29, 1983. This also refers to the investigation conducted by the NRC's Office of Investigations on July 7 - August 9, 1983. A copy of the investigation summary was forwarded to you on December 6, 1983. The inspection and investigation were conducted to evaluate allegations received by the NRC's Region I office concerning the safety of your operations. During the inspection and investigation, numerous violations of NRC requirements were identified. On October 6, 1983, we held an enforcement conference with you during which these violations, their causes, and your corrective actions were discussed.

These violations represent a significant breakdown in the management control of your licensed program and they demonstrate the need for significant improvements in your program to assure safe performance of licensed activities. Such improvements must include adequate understanding of license conditions and regulatory requirements, proper implementation of such requirements, and sufficient audits to ensure such implementation. Specifically, the numerous violations involve (1) failure to provide adequate training; (2) failure to adequately control licensed material; (3) failure to control personnel exposure; and (4) failure to maintain required records.

To emphasize the importance of adequate management control of licensed activities, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Six Thousand Four Hundred Dollars (\$6,400) for the violations set forth in the enclosed Notice. In accordance with the NRC Enforcement Policy, 10 CFR 2, Appendix C, the violations have been categorized in the aggregate as a Severity Level II problem for which the base civil penalty is \$6,400.

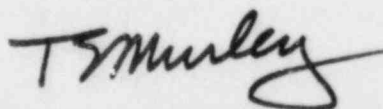
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

You are required to respond to the enclosed Notice and, in preparing your response, you should follow the instructions specified in the enclosed Notice. In your response, you should also provide a description of (1) plans of management to better control licensed activities; (2) plans to develop a system of surveillance and audits to assure prompt detection of deficiencies, accurate identification of the root cause of any deficiency, and prompt correction of identified deficiencies; and (3) plans to assure that you provide and maintain adequate instruction to your employees on both the license and NRC requirements. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

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 enclosure 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,



Thomas E. Murley
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of Delaware
Commonwealth of Massachusetts (2)

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Lehigh Testing Laboratories, Inc.
Wilmington, Delaware 19899

Docket No. 30-14700
License No. 07-01173-03
EA 83-121

An NRC inspection of activities authorized under License No. 07-01173-03 was conducted on July 7, 8, 20, 21, 27, and 28, and August 11, 1983. An investigation was also conducted by the NRC's Office of Investigations on July 7 - August 9, 1983. During the inspection and investigation, numerous violations of NRC requirements were identified. These violations represent a significant breakdown in the management control of the licensed program.

To emphasize the importance of adequate management control of licensed activities, the Nuclear Regulatory Commission proposes the imposition of a civil penalty in the amount of Six Thousand Four Hundred Dollars for these matters. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, these particular violations and the associated civil penalty are set forth below:

1. Condition 16 of License No. 07-01173-03 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in an application dated July 7, 1978, and a letter dated July 13, 1980. Included with this application is the licensee's Administrative Manual. A revision to this manual was provided with the July 13, 1980 letter.
 - a. Section 8.B(i) and (iii) of this manual requires that untrained personnel ("trainees") be given a minimum of 12 hours of formal classroom instruction before they perform assigned duties.

Contrary to the above, for the three years prior to July 7, 1983, trainees were allowed to act as assistant radiographers and radiographers, but were not given a minimum of 12 hours of formal classroom instruction.
 - b. Section 8.B(iii) of this manual requires that a trainee, in addition to the 12 hours of formal classroom training and on-the-job training, be given a written examination and attain a score of 75% or better to qualify as an assistant radiographer.

Contrary to the above, as of July 7, 1983, three individuals classified as trainees have acted as assistant radiographers without qualifying as assistant radiographers in that they were not given a written examination.

- c. Section 8.C of this manual requires that in order to qualify as a radiographer, an assistant radiographer must (1) have three months of on-the-job training, (2) take a written examination on which a score of at least 80% is obtained, and (3) pass a practical examination.

Contrary to the above:

- (i) After taking a written examination on April 4, 1983, to qualify as a radiographer, an individual was allowed to act as a radiographer, even though he did not have three months of on-the-job training.
- (ii) After taking assistant radiographer and radiographer examinations on November 15, 1982, an individual was allowed to act as a radiographer without taking a practical examination.
- d. Section 8.C(iii) of this manual requires that personnel with previous experience as radiographers or radiographer's assistants with another company be examined by both written and practical examinations before assignment to radiographic operations at Lehigh Testing Laboratories.

Contrary to the above, on January 25, 1983, an individual with previous experience as a radiographer at another company was hired by Lehigh Testing Laboratories and was allowed to act as a radiographer without being given the required written and practical examinations.

- e. Section 14 (Recordkeeping Requirements) of this manual requires that the utilization log for each source used indicate the location and orientation of the source with respect to the object being radiographed (shooting sketch) and that the radiation levels outside the restricted area be noted.

Contrary to the above, as of July 7, 1983, the utilization log did not contain a shooting sketch and did not identify radiation levels in unrestricted areas for licensed material used on numerous occasions, including June 1, 2, 3, 6, 16, 27, and 29, 1983.

2. 10 CFR 34.31 requires that records of written examinations be maintained.

Contrary to the above, an assistant radiographer's examination taken on November 15, 1982 was falsified in that the examination was backdated to June 7, 1982.

3. 10 CFR 34.41 requires that during each radiographic operation, the radiographer or radiographer's assistant maintain direct surveillance of the operation to protect against unauthorized entry into a high radiation area.

Contrary to the above, a radiographer employed by the licensee, who was responsible for direct surveillance over a high radiation area on June 23, 1983, at a field site in Chester, Pennsylvania, informed an NRC inspector that such surveillance was not maintained at all times.

4. 10 CFR 20.207(a) requires that licensed materials stored in an unrestricted area be secured against unauthorized removal from the place of storage.

10 CFR 20.207(b) requires that materials in an unrestricted area not in storage be under constant surveillance and immediate control of the licensee. As defined in 10 CFR 20.3(a)(17), an unrestricted area is any area access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above, on July 7, 1983, an NRC inspector observed two licensed source changers, each containing 2 to 5 curies of iridium-192, being stored on the floor outside the storage cabinet of the NDT room (x-ray facility) at 4027 New Castle Avenue, Wilmington, Delaware. This was an unrestricted area since a tenant in the adjacent room shares a portion of the NDT room for a storage area and has free access to it at all times. This material was, therefore, not under constant surveillance nor under immediate control of the licensee when licensee employees were not present.

5. 10 CFR 20.201(b) requires that each licensee make such surveys as may be necessary to comply with all sections of 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:

- a. As of July 7, 1983, surveys (evaluations) were not made to assure compliance with 10 CFR 20.101, which limits radiation dose to individuals in restricted areas. Specifically,
 - (i) no evaluations of the dose to the whole body and extremities of employees were made to ensure the exposure reported by film badges were the maximum doses received during incidents that occurred on September 16, 1982 and October 29, 1982; and,
 - (ii) no evaluations of the dose to the extremities were made for employees who participated in a source retrieval and subsequent repositioning operation on March 16, 1983, and a source retrieval on March 30, 1983.

b. On June 20, 1983, at 4027 New Castle Avenue, Wilmington, Delaware, and June 23, 1983, at Chester, Pennsylvania, surveys were not made outside the restricted areas to assure compliance with 10 CFR 20.105(b), which limits radiation levels in unrestricted areas.

6. 10 CFR 20.401 requires that each licensee maintain records showing the results of surveys required by 10 CFR 20.201(b), which requires that each licensee make such surveys as may be necessary to comply with all Sections of Part 20.

Contrary to the above, as of July 7, 1983, records were not maintained of those surveys made outside the permanent facility at 4027 New Castle Avenue, Wilmington, Delaware, to assure compliance with 10 CFR 20.105, which limits radiation levels in unrestricted areas.

7. 10 CFR 20.203(b) requires that each radiation area be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: "Caution Radiation Area." 10 CFR 20.203(c) requires that each high radiation area be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words "Caution High Radiation Area."

Contrary to the above, on June 20, 1983, at 4027 New Castle Avenue, Wilmington, Delaware, and June 23, 1983, at Chester, Pennsylvania, the radiation area and the high radiation area at these locations were not posted with the required signs.

8. 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.

Contrary to the above, as of July 7, 1983, the entrance for personnel access to the high radiation area in a permanent radiographic installation located at the 4027 Castle Avenue, Wilmington, Delaware, did not have the required visible and audible warning signals to warn of the presence of radiation.

9. License Condition 10 permits licensed material to be stored at 4029 New Castle Avenue, Wilmington, Delaware, and to be used only at temporary job sites anywhere in the United States where the Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.

Contrary to the above, as of July 7, 1983, licensed material was permanently stored at 4027 New Castle Avenue, Wilmington, Delaware, a location not authorized by the license, and the material was used at this permanent location which is not a temporary job site.

10. 10 CFR 34.28(b) requires that a program be established for inspection and maintenance of radiographic exposure devices, storage containers and source changers at intervals not to exceed three months and that records of these inspections be kept for two years.

Contrary to the above, as of July 7, 1983, no quarterly maintenance had been performed on radiographic crank device No. 2796 which had been in the licensee's possession for a period greater than three months.

11. 10 CFR 20.102(a) requires that, before individuals enter restricted areas, the occupational dose received at other facilities in the current calendar quarter be determined.

Contrary to the above, as of July 7, 1983, individuals hired in September 1982 and January 1983 entered restricted areas, but the occupational dose received at other facilities during the current calendar quarter of employment had not been determined before the entry.

12. 10 CFR 20.408(b) requires that certain licensees make a report to the Commission of the radiation exposure of each individual who has terminated employment. Licensees who use byproduct material for industrial radiography are specifically included.

Contrary to the above, as of July 7, 1983, reports of radiation exposure have not been provided to the Commission for individuals who terminated employment in November 1982, February 1983, March 1983, and May 1983.

13. 10 CFR 34.27 requires that each licensee maintain current utilization logs for each sealed source describing the radiological exposure device or storage container in which the sealed source is located, the identity of the radiographer to whom the source is assigned, the plant or site where used, and the dates of use.

Contrary to the above, as of July 7, 1983, current utilization logs had not been maintained for any sealed source used for radiographic work which had been performed in the permanent facility at 4027 New Castle Avenue, Wilmington, Delaware.

14. 10 CFR 34.43(c) requires that a record be made of the survey performed when it is the last survey before locking the exposure device and ending direct surveillance of the operation.

Contrary to the above, as of July 7, 1983, records of the last survey of radiographic exposure devices before locking the device and ending direct surveillance of the operation had not been made for radiographic operations which had been performed at the permanent facility at 4027 New Castle Avenue, Wilmington, Delaware.

Collectively, these violations in the aggregate represent a Severity Level II problem. (Supplements IV and VI).

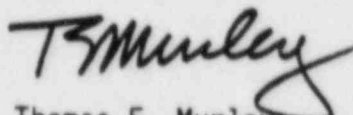
Cumulative Civil Penalty - \$6,400 - assessed equally among the violations.

Pursuant to the provisions of 10 CFR 2.201, Lehigh Testing Laboratories, Inc., is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, with a copy to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including 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 will be 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. 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, Lehigh Testing Laboratories, Inc., may pay the civil penalty in the amount of Six Thousand Four Hundred Dollars or may protest imposition of the civil penalty in whole or in part by a written answer. Should Lehigh Testing Laboratories, Inc., fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalty in the amount proposed above. Should Lehigh Testing Laboratories, Inc. elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer 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 contained in Section IV.B of 10 CFR Part 2, Appendix C 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 by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of Lehigh Testing Laboratories, Inc., 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 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 penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 19TH day of December 1983



Lehigh Testing Laboratories, Inc.

4029 NEW CASTLE AVENUE • P.O. BOX 1241 • WILMINGTON, DELAWARE 19899 • 302-655-7358

January 12, 1984

DIRECTOR, OFFICE OF INSPECTION AND ENFORCEMENT
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555

REFERENCE: Docket No. 30-14700
License No. 07-01173-03
EA No. 83-121
Response to Notice of Violation and Proposed
Imposition of Civil Penalty dated December 19, 1983

Dear Sir:

This letter is our response to the NRC Region I letter of December 19, 1983 and NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY from Mr. Thomas E. Murley Regional Administrator.

It is our intention to pay the entire civil penalty of \$6,400. A check for that amount is attached.

Our policy is now, and always has been, to conduct industrial radiography in a safe manner, in full compliance with all applicable regulations. The management did not realize there were serious technical deficiencies in our training program and in our record-keeping. Prior audits by the NRC revealed no such extensive difficulties. We did not realize that a substantial growth of our business's sales had brought with it "looseness".

We have "learned our lesson". There now is, from the president of the company down through the general manager, the radiation safety officer, and the radiographers, a positive movement toward making ourselves as safe as possible, as high quality as possible, and as knowledgeable as possible in matters having to do with licensed materials.

Enclosed with this letter are the following: statement of explanation and corrective steps for each alleged violation; statement of management plans for improvements of controls, audits, and training; policies for radiographic personnel; various supporting documents; and a copy of our revised license application.

Very truly yours,

LEHIGH TESTING LABORATORIES, INC.

David Krashes

David Krashes
President

DK:cjs
Enclosures

Sworn to and subscribed before me this
12th day of January, 1984.

Susan Steady
Notary Public

cc: USNRC Region I: Mr. Thomas E. Murley, Regional Administrator



Lehigh Testing Laboratories, Inc.

4029 NEW CASTLE AVENUE • P.O. BOX 1241 • WILMINGTON, DELAWARE 19899 • 302-655-7358

January 12, 1984

Director, Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

REF: Docket No. 30-14700; License No.07-01173-03; EA No. 83-21

Gentlemen:

This letter supplements Dr. Krashes' cover letter for our response to your December 19, 1983 notice of violation and proposed imposition of civil penalty. As we have stated to the commission in our previous correspondence and at the two meetings at NRC Region I, we admit that violations have occurred. We are now in full compliance on all of the matters cited, and we are confident that the improvements we have made in our management controls and in our internal procedures will minimize their recurrence in the future.

However, I do wish to take this opportunity to discuss the role of Joseph Walling in some of these violations. We consider it unfair that the Commission has judged our firm to be in violation, when he obviously committed several of the violations for the sole purpose of revenge against the company. Consider the following:

1. Walling was the perpetrator of the violations cited in Items #5(b) and #7, each of which occurred immediately after he had been denied overtime pay for a visit to a doctor's office after he had completed his regular shift.
2. He deliberately lied to NRC officials regarding Item #3.
3. He admits that he knew that his training supervisor, Richard Recchia, falsified the date on his written exam, so he shared Recchia's personal guilt for this violation (Item #2).
4. We believe that Walling deliberately removed two source changers from the storage vault just prior to the NRC inspection on July 7. Only Walling knew that the inspection was imminent. We had never before experienced a breach of security of licensed materials. This led to the violation cited in Item #4.
5. Walling made several allegations which NRC inspectors investigated and found to be unsubstantiated. Other allegations he made were of minor significance, or not within the NRC's jurisdiction, and the NRC chose not to investigate them.

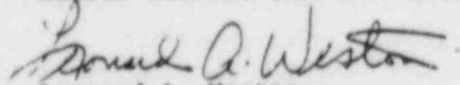
6. Upon conducting an investigation of our own, we found that Mr. Walling has had a lengthy criminal record, spanning nearly 20 years, including multiple felony convictions for burglary, forgery, petty larceny, theft, and passing bad checks. (He also falsified his employment application at Lehigh). The validity of at least some of his testimony in this investigation should be viewed with these facts in mind. We repeat our contention that it is unfair to cite Lehigh for violations based solely on what Walling said he did personally.

7. Mr. Walling apparently informed the local newspaper that he had reported alleged violations to the Commission, because news articles appeared on November 13 and on December 28 in which he was quoted freely. Clearly, he went out of his way to cause difficulty for the company. (The NRC states that they did not divulge Walling's identity to the media at any time.)

We wanted to include the above information in the official record of this investigation. Please contact the undersigned if you wish to obtain a copy of Mr. Walling's arrest and conviction record.

Sincerely,

LEHIGH TESTING LABORATORIES, INC.



Leonard A. Weston
Vice-President and General Manager

cc: Mr. Thomas E. Murley
Regional Administrator, NRC Region I

LIST OF ATTACHMENTS

1. Statement of Causes and Corrective Actions for Each Alleged Violation
2. Statement by J. Ruzowicz concerning the events of June 22 and 23, 1983
3. "Management Plans for Improved Control of Licensed Activities, Improved Audit System, and Improved Training Program"
4. "Strategic Plan" for Lehigh's NDT Department
5. "Special Policies and Instructions for Radiography Personnel"
6. Newly-revised "Source Utilization Report" and instructions on how to prepare it
7. New Safety Training Documents:
 - A. "LTL Radiation Safety Training - Personnel Record"
 - B. "Statements and Acknowledgments Required from Each New Employee in Radiography"
 - C. "Personnel Qualification and Certification Statement" for Assistant Radiographer
 - D. "Personnel Qualification and Certification Statement" for Radiographer
8. Newly-revised "Radiation Safety Manual"

CAUSES AND CORRECTIVE ACTIONS FOR EACH ALLEGED VIOLATION

Note: Some violations have been grouped together because the causes and corrective actions are identical for each one in the group.

ITEM #1(a):

For three years prior to July 7, 1983, trainees acted as Assistant Radiographers and as Radiographers without having the required classroom instruction hours.

ITEM #1(b):

As of July 7, 1983, three individuals classified as trainees have acted as Assistant Radiographers without qualifying as Assistant Radiographers in that they were not given a written exam.

ITEM #1(c):

After taking a written examination on April 4, 1983 to qualify as a Radiographer, an individual was allowed to act as a Radiographer without taking a practical examination. Also, after taking Assistant Radiographer and Radiographer examinations on November 15, 1982, an individual was allowed to act as a Radiographer without taking a practical examination.

ITEM #1(d):

On January 25, 1983, an individual with previous experience as a Radiographer at another company was hired by Lehigh and was allowed to act as a Radiographer without being given the required written and practical examinations.

RESPONSE TO ITEMS #1(a)-(d): Violations admitted.

Causes: Disregard for the need for strict compliance with Lehigh's self-imposed training requirements by the Radiation Safety Officer; failure by the RSO to follow-up on those training and certification functions delegated from May 1982 through May 1983 to a training supervisor (a former RSO at Lehigh); and a lack of attention by the General Manager to assure that the RSO complied fully with such requirements.

Corrective Actions: As of this date, every radiography worker at Lehigh has fulfilled the training and experience requirements specified in the company's existing training program. All such qualifications have been reviewed and approved personally by the General Manager.

We are now in full compliance.

ITEM #1(e):

As of July 7, 1983, the Utilization Log did not contain a shooting sketch and did not identify radiation levels in unrestricted areas for licensed material used on numerous occasions, including June 1, 2, 3, 6, 16, 27, and 29, 1983.

RESPONSE TO ITEM #1(e): Violation admitted.

Causes: Radiographers' entries on Utilization Records were not reviewed on a routine basis by the Radiation Safety Officer.

Corrective Action: Lehigh personnel reconstructed the utilization information that was found to be either missing or incomplete during the inspection. This was done as completely as possible back to January 1, 1983 from backup records. In order to assure that current utilization records are complete and accurate, the RSO has, since September 2, personally reviewed and documented his approval of each Utilization Record, and the General Manager has checked this on a spot basis. Full, accurate documentation on these sheets has been an important topic of the various training sessions held since August 11, 1983, and all employees have been so instructed.

We are now in full compliance.

ITEM #2:

An Assistant Radiographer's examination taken on November 15, 1982 was falsified in that the examination was backdated to June 7, 1982.

RESPONSE TO ITEM #2: Violation admitted.

Causes: The NDT supervisor who deliberately falsified the date on this examination left the company in May of 1983 and could not be questioned by Lehigh management on this matter. However, since he had been given complete authority to confer certification status to Radiographers and to Assistant Radiographers, none of his superiors were aware that he committed this violation, nor could any of them offer an explanation why he did so. The employee whose record was falsified was reportedly aware of this violation when it happened, but did not report it to any of his superiors. This employee is also no longer with the company.

Corrective Action: Since both individuals who either committed or knew of this violation are no longer employed at Lehigh, there is no corrective action applicable to their violation. However, certain management controls have been adopted to prevent recurrence of this type of deliberate violation by current or future employees. Any deliberate falsification of records is cause for immediate dismissal of the individual. Qualifications of prospective Radiographers or Assistant Radiographers are now reviewed, and corresponding certifications are conferred, by the General Manager (see "Management Plans for Improved Control of Licensed Activities", and "Lehigh Instructions for Radiographic Personnel", both enclosed).

We are now in full compliance.

ITEM #3:

A Radiographer employed by the licensee, who was responsible for direct surveillance over a high radiation area on June 23, 1983, at a field site in Chester, Pennsylvania, informed an NRC inspector that such surveillance was not maintained at all times.

RESPONSE TO ITEM #3: Violation denied.

We questioned the other individual, J. Ruzowicz, who was in attendance at that radiography worksite. He stated that surveillance was maintained over the high radiation area throughout the operation. He said the high radiation area was in an open field and that it was readily controlled. The Assistant Radiographer stated that, during the June 23 operation, two small children were seen rounding the corner of the building and attempting to enter the worksite by passing under the posted rope barrier to the restricted area. The children were immediately observed by the Assistant Radiographer and he immediately retracted the source. This could not have been done if surveillance had not been properly maintained (copy of J. Ruzowicz' statement enclosed). We conclude that surveillance was indeed maintained, and suspect that the Radiographer deliberately lied to the NRC inspector to cause difficulty for the company. To support this suspicion, we offer the following:

The Radiographer in charge at this worksite had sufficient training and experience to perform his responsibilities in accordance with applicable regulations, and had properly established and maintained surveillance at many other temporary worksites for several months prior to this date. On June 22, the day before this incident, the Radiographer had been denied overtime pay for time he had spent at a doctor's office. Upon hearing his claim for overtime pay denied, he became visibly angry, and threatened to the General Manager, "You'll regret this!". It is the contention of Lehigh management that, after this date, this employee's attitude suddenly turned reckless and malevolent toward the company, and that he deliberately committed several serious safety violations, and reported several other alleged violations (later found to be without basis in fact) to the NRC which he felt would cause great difficulty for the company and would allow him to "get even". Moreover, we discovered that this Radiographer is a convicted felon, and that he concealed this fact on his employment application.

Corrective Actions: Although we deny the allegation that surveillance was not maintained, this incident has prompted several changes in our operating procedures and management policies. The involved radiographer is no longer with the company, but recognizing potentially serious consequences of actions such an individual may take, we have instructed all radiographic workers to notify a responsible official immediately if they witness any disregard for established procedures or regulations, or if they are asked to perform any unauthorized functions. Our Utilization Report sheet (copy enclosed) contains a section for "additional comments". All workers have been instructed to report any unusual occurrence on this sheet, regardless of whether or not they consider the occurrence significant. In this way, the RSO and other management officials will keep informed.

Management is now paying much closer attention to the attitudes displayed by radiography workers in an attempt to prevent any future violations as a means of "getting even".

ITEM #4:

On July 7, 1983, an NRC inspector observed two source changers, each containing from 2 to 5 curies of Iridium-192, being stored on the floor outside the storage cabinet of the NDT room at 4027 New Castle Avenue, Wilmington, Delaware.

RESPONSE TO ITEM #4: Violation admitted.

Cause: In an attempt to determine how this could have occurred, each of the radiography workers currently employed at Lehigh were questioned (individually, and as a group) about these two unsecured source changers. Each of them denied knowing who placed the changers there. Although we have no proof, it is management's sincere belief that these licensed materials were deliberately put there by the same radiographer discussed in Item #3. He had threatened to make trouble for the company; he knew that an NRC inspection was imminent, having requested the inspection himself; and, according to utilization records and time sheets, he was the last person to have been in the area containing the storage vault. Although this evidence is circumstantial, we consider it to be compelling.

Corrective Action: This violation has been discussed at length with Lehigh's current radiography workers, and all of them have been fully aware of the requirement to store and secure unattended sources. This is an essential topic in our training program, even for individuals training to be Assistant Radiographers.

We are now in full compliance.

ITEM #5(a):

No evaluations of the dose to the whole body and extremities of employees were made to ensure the exposure reported by film badges were the maximum doses received during incidents that occurred on September 16, 1982, and October 29, 1982; and no evaluations of the dose to extremities were made for employees who participated in a source retrieval and subsequent repositioning operation on March 16, 1983, and a source retrieval on March 30, 1983.

RESPONSE TO ITEM #5(a): Violation admitted.

Cause: Written reports of these incidents were made to the Radiation Safety Officer at the time they occurred. Based on the information contained in those reports, the RSO was satisfied that radiation exposures had not exceeded permissible limits. However, he was not aware that extremity dosages should have been calculated for all four incidents, nor was he aware that whole body dosages should have been computed for the September 16 and October 29 incidents, rather than waiting for the film badges to be processed.

Corrective Actions: The required information was sent to NRC Region I in a letter dated August 4, 1983 by the RSO. Because this violation was caused by a failure to understand regulatory requirements, Lehigh's Radiation Safety Officer, its General Manager, and its President have each been engaged, independently, in considerable self-training regarding applicable NRC regulations; a reputable, experienced Radiation Safety Consultant has been retained by the company to provide necessary advice and assistance required by the RSO on these or other matters. In addition, the RSO is scheduled to attend a additional course dealing with the management of licensed radiography operations in mid-February. We have hired an experienced consultant on radiation safety and regulatory matters to advise us in these areas and to conduct independent audits of our compliance with them on at least an annual basis.

We are now in full compliance.

ITEM #5(b):

On June 20, 1983, at 4027 New Castle Avenue, Wilmington, DE, and June 23, 1983, at Chester, PA, surveys were not made outside the restricted areas to assure compliance with 10 CFR 20.105, which limits radiation levels in unrestricted areas.

RESPONSE TO ITEM #5(b): Violation admitted.

Cause: For the June 23 operation at Chester, PA, we have been unable to confirm or deny whether surveys were made by the Radiographer in charge (who is no longer employed by Lehigh). However, this individual claimed that surveillance was not maintained at that operation, a statement the assistant who was in attendance there denies (see Response to Item #3). The assistant does not remember whether the Radiographer performed the required surveys. Whether he performed the surveys, then lied about it, or whether he did not perform the surveys, we feel that his actions were a deliberate personal violation, not attributable to a lack of training or experience. The 4027 New Castle Avenue facility was considered by the RSO to be a permanent facility, for which he assumed that no surveys outside restricted areas were required.

Corrective Actions: Radiographers and Assistant Radiographers have been given considerable refresher training on the methods and occasions for performing surveys, especially to assure that radiation levels in unrestricted areas comply with the limits specified in 10 CFR 20.105. Individuals are acutely aware that such surveys are required for all radiographic operations. See also the corrective action in the response to Item #5(a) above.

We are now in compliance.

ITEM #6:

As of July 7, 1983, records were not kept of surveys made outside the permanent facility at 4027 New Castle Ave. to assure compliance with 10 CFR 20.105, which limits radiation in unrestricted areas.

RESPONSE TO ITEM #6: Violation admitted.

Cause: Records were not maintained of surveys made outside the permanent facility because the RSO did not require Radiographers to complete Utilization Reports for radiography performed there.

Corrective Action: Utilization Reports are now required for all radiographic operations at all locations. The RSO and all radiography workers are now fully aware of this requirement. See also the corrective action for Item #5(a).

We are now in full compliance.

ITEM #7:

On June 20, 1983, at 4027 New Castle Avenue, and June 23, 1983, at Chester, PA, the radiation area and the high radiation area at these areas were not posted with the required signs.

RESPONSE TO ITEM #7: Violation partially admitted, partially denied.

Cause: The required warning signs have been in place at the 4027 New Castle Avenue facility, for all work performed within the shielded enclosure. However, on June 20, the Radiographer, Joseph Walling, directed his assistant, Joseph Ruzowicz, to set up a second worksite outside this room so that they could complete their work faster by using two setups. According to the RSO, this had never been done before and would never have been authorized.

In Chester, on June 23, 1983, the alleged violation did not occur. See the statement of J. Ruzowicz, Assistant Radiographer, enclosed.

Corrective Action: Radiographers and Assistant Radiographers have been fully instructed on the restrictions imposed on radiography performed at 4027 New Castle Avenue, and each of them has received extensive instruction on proper establishment of worksites and on posting requirements.

We are now in compliance.

ITEM #8:

As of July 7, 1983, the entrance for personnel access to the high radiation area in a permanent radiographic installation located at 4027 New Castle Avenue did not have the required visible and audible warning signs to warn of the presence of radiation.

RESPONSE TO ITEM #8: Violation admitted.

Cause: This facility had been established originally as an exposure room in which radiography was performed with x-ray machines. When it became desirable to use this exposure room occasionally for radiography with licensed materials, the RSO instructed radiography personnel to treat it as they treated any temporary worksite, not requiring a visible and audible alarm system. However, the use of isotopes in this facility became more frequent and "permanent", and the RSO was unaware of the NRC regulations that defined when a "temporary" facility became "permanent".

Corrective Actions: Audible and visible alarms were installed at both entrances leading to the high radiation area (exposure room) at 4027 New Castle Avenue on August 30, 1983. See also the corrective action for Item #5(a).

We are now in full compliance.

ITEM #9:

As of July, 7, 1983, licensed material was permanently stored at 4027 New Castle Avenue, a location not authorized by the license, and the material was used at this permanent location which is not a temporary job site.

Cause: The RSO recognized that an NRC-approved amendment to our license was required before the storage location for radioactive materials and devices could be changed. He stated that he delegated the task of requesting such approval to the Assistant RSO, and he assumed it had been granted, but never actually confirmed that the amendment was approved prior to his change of the storage location.

Corrective Action: The General Manager requested NRC approval of an amendment changing the storage location to 4027 New Castle Avenue on September 1, 1983; approval for this was granted on November 8, 1983. In accordance with our Administrative Manual, only the General Manager will request amendment approvals from the NRC licensing branch. Moreover, no changes in existing operations may be implemented until NRC approval has been obtained.

We are now in full compliance.

ITEM #10:

As of July 7, 1983, no quarterly maintenance had been performed on radiographic crank device No. 2796 which had been in Lehigh's possession for a period greater than three months.

RESPONSE TO ITEM #10: Violation admitted.

Cause: This crank was known to be defective. It had been taken out of service and was tagged: "DO NOT USE - OUT OF SERVICE". Unfortunately, the fact that it was taken out of service was not documented, and the NRC inspector reportedly did not see the tagged crank.

Corrective Action: We have a program for quarterly inspections and maintenance of radiographic exposure devices, storage containers and source changers, and we keep records of these inspections for at least two years. Our personnel have been instructed to document all equipment taken out of service and to keep this documentation with the quarterly maintenance records.

We are now in compliance.

ITEM #11:

As of July 7, 1983, individuals hired in September 1982 and January 1983 entered restricted areas, but the occupational dose received at other facilities during the current calendar quarter of employment had not been determined before the entry.

RESPONSE TO ITEM #11: Violation admitted.

Cause: Telephone calls were made by the RSO to the former employers of these individuals to get the above information. The information was received verbally but was not confirmed in writing. Each of the two individual's dosages were within the permissible limits for the quarter. However, records of this information were not maintained.

Corrective Action: This information was subsequently obtained for the two individuals. No individual shall be permitted to enter a restricted area established by Lehigh until he has disclosed in a written, signed statement, either: (1) that he has had no prior occupational dose during the current calendar quarter; or (2) the nature and amount of any occupational dose the individual received during that quarter from sources of radiation possessed or controlled by other persons. This is a condition of employment for all Lehigh employees in the nondestructive testing department.

We are now in compliance.

ITEM #12:

As of July 7, 1983, reports of radiation exposure had not been provided to the Commission for individuals who had terminated their employment in November 1982, February 1983, March 1983, and May 1983.

RESPONSE TO ITEM #12: Violation admitted.

Cause: The RSO thought, incorrectly, that the NRC was to be provided this information only on the request of a departing employee.

Corrective Action: Because this violation was caused by a failure to understand regulatory requirements, Lehigh's Radiation Safety Officer, its General Manager, and its President have each been engaged independently, in considerable self-training regarding applicable NRC regulations; a reputable, experienced Radiation Safety Consultant has been retained by the company to provide necessary advice and assistance required by the RSO on these or other matters. In addition, the RSO is scheduled to attend a additional course dealing

with the management of licensed radiography operations in February. We have hired an experienced consultant on radiation safety and regulatory matters to advise us in these areas and to conduct independent audits of our compliance with them on at least an annual basis.

We are now in compliance.

ITEM #13:

As of July 7, 1983, current utilization logs had not been maintained for any sealed source used for radiographic work performed in the permanent facility at 4027 New Castle Avenue.

RESPONSE TO ITEM #13: Violation admitted.

Cause: The RSO did not require utilization records to be completed for radiographic operations performed at 4027 New Castle Avenue.

Corrective Action: Since July 7, utilization records have been completed for all radiographic operations. See also the Corrective Action for Item #12.

We are now in compliance.

ITEM #14:

As of July 7, 1983, records of the last survey of radiographic exposure devices before locking the device and ending direct surveillance of the operation had not been made for radiographic operations performed at the permanent facility at 4027 New Castle Avenue.

RESPONSE TO ITEM #14: Violation admitted.

Cause: The required last survey of each exposure device before locking it has always been made by Radiographers at Lehigh Testing Laboratories. Since Utilization Records had not been required by the RSO for operations conducted at 4027 New Castle Avenue, there was no means given the radiographer to record the survey.

Corrective Action: Since July 7, complete Utilization Records have been documented for all radiographic operations. The Utilization Record includes the last survey of the radiographic exposure device before locking the device and ending direct surveillance. See also the Corrective Action for Item #12.

We are now in full compliance.

STATEMENT BY J. RUZOWICZ CONCERNING THE EVENTS OF JUNE 22 & 23, 1983

There were two separate instances where people approached the radiographic worksite at A. J. Schmidt in Chester, PA.

In the first instance, which I believe occurred on June 22, 1983, I was working as an assistant with Joe Walling, who was the Radiographer in charge. After we had completed our work and were in the process of loading our equipment into our truck, two teenage boys came around the corner of 2nd and Fulton Streets to ask us if we had seen a baseball they had lost in the area. The source was not in use, and neither of the teenaged boys could have received any radiation.

In the second instance, which I believe occurred on the following day, June 23, 1983, Joe Walling was again the Radiographer and I was the assistant. We had placed warning signs and a rope between the buildings. While we were making an exposure in the plate storage area between Schmidt's main building and their pipe shop, I noticed two small boys walking around the corner of the building and under the rope we had placed there. I immediately retracted the source. I estimate that the children were about 50 feet away from the source for the time it took me to crank in the source, about 3 to 5, seconds.

During both days, we maintained constant surveillance of the high radiation area. This was rather easy to do because of the open location. We were in constant view of the high radiation area. In my opinion, Joe Walling lied when he said that we didn't maintain surveillance.

The above statement is true to the best of my recollection and belief.

Joseph J. Ruzowicz
1-12-84

January 6, 1984

MANAGEMENT PLANS FOR IMPROVED CONTROL OF LICENSED ACTIVITIES,
IMPROVED AUDIT SYSTEM, AND IMPROVED TRAINING PROGRAM

1. BUSINESS STRATEGY

The business strategy for non-destructive testing (copy attached) to be followed by management for the next two years includes the following key elements: development of more professionalism in NDT personnel; reorganization and upgrading of facilities; more top management involvement and assistance by the President and the General Manager with the department manager; and increased assistance to the Radiation Safety Officer regarding the recordkeeping requirements of the department. We believe these changes are directed to the roots of our problem.

2. BETTER MANAGEMENT CONTROL

There will be more top management involvement in the radiation safety program. The President of the company, who formerly was not personally involved in the radiography business, has made himself sufficiently knowledgeable to be able to perform audits of records and operations. He will perform occasional, unannounced audits and will check records of audits performed by the General Manager. The President will insist on adherence to license and company requirements, so that he can be assured that Lehigh radiographic operations are safe and in strict compliance with regulations. The top priority of safety operations will be constantly emphasized by management.

We have submitted a new Radiation Safety Manual with our license renewal application (attached) which contains complete revisions of auditing procedures that are more realistic than those contained in our current license. The new procedure includes audits of the performance of the Radiation Safety Officer and audits by the President (section 3.2.2).

The President and General Manager will each spend more time with radiography personnel to discuss "what is going on" and to give them ready access to top management. This will provide further opportunities to stress the need for safety and professionalism. All personnel will have an easy line of communication, and will be encouraged to report any problems they are aware of, without fear of recrimination, to the President. We are presently considering a system of rewards for useful safety suggestions.

Our radiographic facility is being cleaned and reorganized to allow better control of and protection from radiographic operations performed there, and also to provide more storage, more freedom of movement, and a more professional atmosphere.

We will emphasize the need for correct and complete recordkeeping. Our policy will be that anything not recorded will be considered "not done". In each personnel file is a new certification sheet of the worker's status (see enclosed example) and a detailed description of what he can or cannot do. Each radiography worker has been issued a wallet-sized card containing the same information.

The utilization record (copy attached) has been revised to include more information. We are now requiring that any unusual occurrence during radiographic operations be reported on the utilization log. This will enable management to have more information on field operations. Proper completion of each utilization log is now being reviewed and approved by our Radiation Safety Officer, and a complete, accurate description of every different utilization is mandatory.

3. SYSTEM OF SURVEILLANCE AND AUDITS

There is an improved system of unannounced audits. As stated in paragraph 3.2.2 of our recently revised Radiation Safety Manual, the General Manager will conduct semiannual, unannounced audits of licensed activities, covering the compliance of operations, of individuals (including the Radiation Safety Officer) and of the recordkeeping system. Written records of these audits will be maintained, problems will be identified, and corrective actions will be taken.

The Radiation Safety Officer will conduct, at least monthly, unannounced audits of the licensed activities performed by Radiographers and Assistant Radiographers. The audits will be occasions for detecting problems and for providing refresher training. The General Manager and President will instruct the Radiation Safety Officer on the objectives of these audits. All of these monthly audits by the RSO will be documented.

Additionally, the President will conduct unannounced spot audits of selected activities relating to licensed operations. Two of these have already been performed. One recent audit by the President discovered a training violation which was voluntarily reported to the NRC. Although not specified in the new license application, records of audits performed by the President will be written and maintained for review by the NRC.

For several months now, we have retained the services of an independent consultant in industrial radiography and radiation safety. He has advised us on revisions of the audit and safety system. At least once each year he will be asked by the General Manager to perform an unannounced general audit of licensed activities, including evaluations of operations, records, training, and follow-ups to the audits performed by the Radiation Safety Officer and the General Manager. His report will be submitted to the President. Corrective actions will be taken for any problems that are identified.

4. BETTER INSTRUCTIONS FOR EMPLOYEES

Each individual involved in licensed activities will clearly know his status and his responsibilities, including exactly what he can and cannot do at his status level. He will understand the requirements of the license and the company's policy that safety and professionalism are his top priority. To make these things possible:

A. We will taken greater care in the selection of new employees. No new untrained employee in radiography will be permitted to begin on-the-job training at radiography worksites until successfully completing a four hour training course and examination. Then, further on-the-job training must be completed before he can become a permanent employee.

B. Promotions or changes in status of an employee will be conferred only by the General Manager and will be announced to the entire company in a memorandum and to the press in a press release. (See enclosed company policy memorandum).

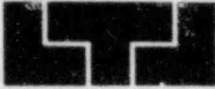
C. An individual's safety record and his attitudes to safety will be considered during personnel and pay reviews. Each individual will be issued an identification card defining his certification status and what he is and is not authorized to do.

D. Company personnel policies and safety objectives will be explained to all radiographic personnel, and such explanations will be documented.

E. The Radiation Safety Manual has been revised completely in a more organized format and in more easily understood language to encourage radiography workers to refer to it as a working tool whenever necessary.

F. We have employed a consultant to review our procedures for safety and operations, and to conduct training programs. We will use him to help us keep abreast of industry practice and changes of NRC regulations.

G. The Radiation Safety Officer will be attending a special management course, designed specifically for manager of radiography activities. One of Lehigh's Radiographers will be attending a 40-hour classroom session on the safe use of radiographic isotopes. This will bring his total documented instruction time in radiation safety to more than 100 hours.



Lehigh Testing Laboratories, Inc.

4029 NEW CASTLE AVENUE • P.O. BOX 1241 • WILMINGTON, DELAWARE 19899 • 302-655-7358

TWO-YEAR STRATEGIC PLAN FOR NDT DEPARTMENT

January 12, 1984

D. Krashes

The department will continue to perform field radiography at customer work sites as is done presently. We will attempt to retain this business, and will be willing to grow in it modestly. The objective of our future sales efforts will change from attempting to attract large increases in field radiography to attempting to attract sizable growth in the types of NDT that may be done in our own laboratory. Our goal is that 1/3 to 1/2 of our total NDT sales will be in-house work two years from now. At the same time, we will try to build overall profitability at a modest rate.

We will make a concerted effort to identify and develop a new type of NDT service at Lehigh which is a "state-of-the-art" capability. Thermal imaging has been suggested as one possibility. We wish to enter technical NDT fields which are relatively unique, and for which the competition is not as intense as the areas in which we are currently active.

We will attempt to instill in our NDT people a real spirit of pride and of "belonging" to Lehigh. Our aim will be to make the department truly professional, and we will do this by reorganizing and improving our facilities, by treating our NDT employees like professionals, by requiring them to act like professionals, and by issuing better personal equipment to them.

More top management assistance will be given to the department manager. Also, we will attempt to train one of the individuals in the department to become an assistant to the manager who can handle some of his responsibilities when the manager cannot. The manager will attempt to build the department by using his sales skills in emphasizing a full service capability, prompt response and fast turnaround time, and reliable technical quality, but will not attempt to compete on price with other NDT firms who do not offer these benefits to the marketplace.

SPECIAL POLICIES AND INSTRUCTIONS FOR RADIOGRAPHY PERSONNEL

A complete review of our radiographic and safety procedures under our license from the Nuclear Regulatory Commission has led us to make certain changes in personnel policies and methods of operation.

Safety of radiography, both by x-ray machine and by isotopes, is of primary importance at Lehigh. Nothing should ever be done to shortcut safety. All operations must be as safe as humanly possible. As a worker in radiography, you should feel free to communicate safety suggestions, complaints or concerns to the Radiation Safety Officer, to the General Manager, or to the President, without any fear of recriminations. These individuals' names, office telephone numbers, and home telephone numbers may be obtained from the front office at Lehigh or at Massachusetts Materials Research.

Whether you are a Radiographer or an Assistant Radiographer, whenever you are assigned to participate in radiography operations, you are authorized to decline to perform radiography at any site that you consider to be unsafe or difficult for you to maintain compliance with regulations. In such instances, you should contact the Radiation Safety Officer or General Manager immediately to request instructions. If you are a certified Radiographer, your foremost responsibility is to assure that the operations you conduct or supervise are in strict accordance with the Radiation Safety Manual and with all applicable laws.

Any newly-employed, untrained individual who is to work on activities licensed to Lehigh by the Nuclear Regulatory Commission is currently required to receive a minimum of 12 hours of classroom training and must successfully complete a written examination before he will be allowed to visit or work at a radiation site. He must then

successfully complete certain on-the-job training requirements before he may take an active part in any operations. If he fails the examination, or fails to satisfactorily complete the on-the-job training, his probationary employment at Lehigh will be terminated. Every individual hired for this type of work will be advised, prior to employment, that this is a condition of his employment.

All changes in status, from Trainee, to Assistant Radiographer, to Radiographer, will be conferred only by the General Manager. While such changes may result from examinations, training, and experience administered by the Radiation Safety Officer and may be recommended by the RSO, only the General Manager can approve and issue the actual certification. Each person working in radiography will be issued a copy of the certification in the form of a wallet sized card. The card clearly shows your exact status, but more importantly, it explains exactly what you are authorized to do and what you may not do. If you ever have any doubt about what you are authorized to do, feel free to ask the Radiation Safety Officer, the General Manager, or the President.

Your advancements in the company, or change of status may be publicized within the company in a memorandum or to the news media by a press release.

Because safety is of the utmost importance to us in our radiographic operations, your individual safety record will be considered along with other factors whenever you are given a performance review or when a pay increase is being considered for you. Individuals who have unsatisfactory safety records or safety attitudes are subject to warnings, suspension, or dismissal.

Internal Correspondence

DATE January 12, 1984

Lehigh Testing Laboratories, Inc.

FROM L. Weston



SUBJECT How to Properly Complete the Revised SOURCE UTILIZATION REPORT

TO All Radiography Personnel

As you know from last week's training session, a new Radiation Safety Manual was prepared in November for our license renewal application. We anticipate that the Manual will eventually be approved, but official approval may not be granted for several months. In the meantime, I would like to start making a gradual transition between the old and new manuals. As far as the NRC is concerned, we are permitted to make any improvements to our systems and procedures that we wish, as long as we can demonstrate that the basic requirements contained in the existing manual are being met. We will not be implementing any changes that would result in non-compliance with our present procedures. ent Operating and Emergency Procedures.

With this in mind, I am requiring that, beginning immediately, all radiography personnel start using the attached "Source Utilization Report" (form 201). Please note that this form has just been revised (Revision 2, dated 1-12-84). This form should replace Revision 1 contained in the new manuals you were given last week. There are several essential differences between Revision 2 and the "Utilization Log" sheets you have been using:

1. The title has been changed. "Source Utilization Report" (SUR) seems more appropriate. These forms will continue to be filed chronologically in the "Utilization Log" file in the film interpretation area.
2. The Lehigh Job No. and the name of the Customer have been added, merely to allow better correlation between this form and certain other documents.
3. The Crank Serial No. has been added (per C. Gilkey's suggestion).
4. When you are transporting licensed materials in a vehicle, you are required to survey not only the surface of the vehicle, but you also must perform a survey within the passenger compartment. According to par. 1.6.2 D in the new manual, both of these surveys must be below 2 mR. A space for the passenger compartment survey reading has been added.
5. A checklist for your daily equipment inspections has been provided. Hence, you will no longer be required to complete the existing sheet titled, "Radiographic Device - Daily Maintenance and Inspection Report". However, you must perform all the same daily inspections as before. If any of the components malfunction or need maintenance, you must report this under "Additional Comments". Note that you must also check the survey meter(s) you are using on the new form. For specific instructions, see paragraph 11(A) of the old manual, and paragraph 2.6.1 of the new manual.

6. "Maximum Exposure Time in any One Hour" - this is a new entry. As discussed in 1.9.2 of the new manual, the unrestricted area must have no more than two mR in any one hour. For example, if you are measuring 10 mR/hr at the boundary of the restricted area during an exposure, you must limit the exposure time in any one hour to 2/10 of an hour, or 12 minutes. Hence, when you choose to establish a restricted area boundary at which the dose rate exceeds 2 mR/hr, you must record the maximum exposure time you have made in any one hour, so that the "2 mR in any one hour" criteria can be substantiated.

7. Your initial and final Dosimeter readings will no longer be recorded on the utilization form. Instead, the Assistant RSO will maintain a Form 205, "Quarterly Pocket Dosimeter Record", for each individual. See section 1.5.5 of the new manual for specific procedures.

8. "Collimator ID" - in this space, you must identify the collimator you are using. This is an absolute must so that, if an incident occurs, the degree of shielding afforded by the collimator may be taken into account in subsequent analyses of the incident.

9. "Additional Comments" - as noted in #5, you may use this space to report any problems you detect during your daily maintenance checks. You may use this space to indicate whether you used rope barriers. In general, however, you MUST report in this space (and on the back of the sheet, if necessary), anything unusual that occurs from the time you take the source from the storage vault until the time you return it. You are urged to report any non-routine circumstances or problems encountered during the utilization, regardless whether they affected your performance of radiography operations. For example, you should use "Additional Comments" to report the details of temporary storage of the source, intruders, traffic accidents, uncooperative customers, equipment malfunctions, vehicle problems, etc. If on-the-job safety training was being provided to a Trainee, you would note that fact here, since as a non-participant his name would not appear among the signatures at the bottom of the Form.

10. Shooting Sketch - you will note that more details are now required for the shooting sketch. The approximate size and shape of the restricted area should be indicated, and the actual survey readings along the perimeter of the restricted area must be reported. Note also that a separate sketch is needed for each set-up. A set-up is any significant change in the location or the orientation of the source, such that would require a different boundary for the high radiation area or the radiation area. The Assistant RSO will generally review and initial the Form at the lower right before submitting the Form to the RSO for final review and approval.

11. Signatures - each individual participating in the operations must sign his own name. Your signature certifies that the information on the Form is correct to the best of your knowledge.



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

OCT 19 1983

License: 49-19585-01
EA 83-110

Perforating Services, Inc.
ATTN: Mr. Charles B. Franklin
P.O. Box 912
Casper, Wyoming 82601

Gentlemen:

SUBJECT: ORDER TO SHOW CAUSE AND ORDER TEMPORARILY SUSPENDING
LICENSE (EFFECTIVE IMMEDIATELY)

Enclosed herewith is an Order, effective immediately, suspending your byproduct material license and providing you an opportunity to show cause why your license should not be revoked.

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 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,

A handwritten signature in cursive script, appearing to read "Richard C. DeYoung".

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure: Order to Show Cause and Order
Temporarily Suspending License
(Effective Immediately)

cc: Wyoming Dept. of Health
and Social Services
Radiological Health Services

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of)

PERFORATING SERVICES, INC.
P.O. Box 912
Casper, Wyoming 82601

)
License No. 49-19585-01
EA 83-110

ORDER TO SHOW CAUSE AND ORDER TEMPORARILY SUSPENDING LICENSE
(EFFECTIVE IMMEDIATELY)

I

Perforating Services, Inc., P.O. Box 912, Casper, Wyoming 82601 (the "licensee") is the holder of a specific byproduct material license issued by the Nuclear Regulatory Commission (the "Commission") pursuant to 10 CFR Part 30. The license, issued on June 4, 1981, and due to expire on June 30, 1986, authorizes the use, storage, and transfer of byproduct material as described in the licensee's application dated October 26, 1980, and letter dated May 10, 1981.

II

During an NRC inspection of the licensee on September 28 and 30, 1983, the NRC inspector was informed by the President and Vice President that since receipt and use of licensed material on or about November 1981, they had not done the following: 1) had not obtained personnel monitoring devices (film badges or TLD's); 2) had not obtained a survey meter to perform radiation surveys to assure compliance with 10 CFR Part 20 and had not conducted the surveys required in the licensee's procedures; 3) had not leak tested the sealed source; 4) had not set up a radioactive materials storage area as described in the license application;

5) had not posted documents per 10 CFR 19.11; 6) had not provided instruction to personnel per 10 CFR 19.12; 7) had not maintained any receipt records at the place of use to identify what material the licensee possessed; 8) had not complied with various requirements for transporting radioactive materials; and 9) had not conducted an audit to assure compliance with NRC requirements. Although the licensee's officers apparently understood NRC requirements, they had neglected to take action to ensure compliance with these requirements.

The results of this inspection indicated that the licensee had been conducting licensed activities in violation of Commission requirements since receipt and use of material as enumerated below:

1. License Condition 15 requires, in part, that sealed sources shall be tested for leakage or contamination at intervals not to exceed 6 months and that leak test records shall be maintained.

Contrary to this requirement, the sealed source used for well-logging had not been leak tested since receipt of material on or about November 1981 to September 30, 1983.

2. License Condition 17 requires, in part, that licensed activities be conducted in accordance with statements, representations, and procedures contained in the application dated October 26, 1980.
 - a. Contrary to Item 10 of the application, radiation survey instruments were not obtained by the licensee to perform required radiation surveys.

- b. Contrary to Item 11 of the application, personnel monitoring devices were not provided to individuals working with licensed material.
 - c. Contrary to Item 15 of the application, the radiation protection officer did not fulfill his duties, such as to conduct audits, to assure licensed activities were being conducted in compliance with NRC requirements.
 - d. Contrary to Appendix A, Item 6.a, of the application, the licensee did not maintain a utilization log for the use of licensed material.
 - e. Contrary to Appendix A, Item 6.e, of the application, the licensee did not conduct quarterly surveys of an area where licensed material was stored.
 - f. Contrary to Appendix A, Item 6.g, of the application, the licensee did not conduct radiation surveys at the customer well sites where licensed material was used.
 - g. Contrary to Appendix B, Item 8.a, of the application, the licensee did not have a storage area for licensed material as described in the application.
3. 10 CFR 20.105(b)(2) states, in part, that no licensee shall 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 100 millirem in any 7 consecutive days.

Contrary to this requirement, on September 28, 1983, radiation levels existed in an unrestricted area adjacent to a radioactive materials storage location of such magnitude that if an individual were continuously present in this area, he could have received a dose of 200 millirem in 7 consecutive days.

4. 10 CFR 20.201(b) requires that each licensee make or cause to be made surveys as: (a) may be necessary for the licensee to comply with the regulations in 10 CFR Part 20, and (b) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

Contrary to this requirement, as of September 30, 1983, radiation surveys had not been conducted of an unrestricted area adjacent to where curie quantities of licensed material were stored.

5. License Condition 16 requires, in part, that the licensee shall transport licensed material in accordance with Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material for Transport and Transportation of Radioactive Material under Certain Conditions."

10 CFR 71.5(a) requires, in part, that no licensee shall transport any licensed material outside the confines of his plant or other place of

use, or deliver any licensed material to a carrier for transport, unless the licensee complies with applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation in 49 CFR Parts 170-189.

- a. Contrary to 49 CFR 172.200(a), shipping papers were not provided for packages containing Type A quantities of radioactive material when transported on public highways in Wyoming.
- b. Contrary to 49 CFR 172.403, the licensee stated that the shipping container used for transporting a well-logging source was not labeled with an appropriate radioactive yellow-III label when being transported on public highways in Wyoming.
- c. Contrary to 49 CFR 173.425(a), the licensee did not possess the Specification 7A package certification for Type A quantities of licensed material transported on public highways in Wyoming.
- d. Contrary to 49 CFR 173.476(a), the licensee did not possess the certification for Special Form Material transported on public highways in Wyoming.
- e. Contrary to 49 CFR 178.350-3, the package used to transport Type A quantities of radioactive material did not have the required markings ("USA DOT 7A Type A").

6. 10 CFR 19.11(a) and (b) requires, in part, that each licensee shall post current copies of specified regulations and the license, or a notice specifying where such documents may be examined.

Contrary to this requirement, neither the documents nor a notice were posted on September 28, 1983.

7. 10 CFR 19.12 requires, in part, that each licensee shall instruct individuals working in restricted areas of the precautions and procedures to minimize exposures to radiation and radioactive materials and in the applicable provisions of the Commission's regulations and licenses.

Contrary to this requirement, the licensee had not provided such instructions to an individual who performed as an operator where licensed material was used and stored.

8. 10 CFR 20.203(e)(1) requires that each area or room in which licensed material is used or stored and which contains any radioactive material in an amount exceeding 10 times the quantity of such material specified in Appendix C of Part 20, shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: CAUTION (or DANGER) RADIOACTIVE MATERIAL.

Contrary to this requirement, on September 28, 1983, an area used for the storage of a package containing curie quantities of americium-241 was not posted with such a sign.

9. 10 CFR 30.51(a) requires each person who receives byproduct material pursuant to a license issued pursuant to the regulations in this part shall keep records showing the receipt, transfer, and disposal of such byproduct material.

Contrary to this requirement, on September 28 and 30, 1983, records for receipt of licensed material were not available at the licensee's place of use for a well-logging source containing curie quantities of americium-241, and the licensee did not know if it possessed a 3-curie or a 5-curie source.

Under section 186 of the Atomic Energy Act of 1954, as amended, a license may be suspended or revoked for, among other things, conditions which would warrant the Commission to refuse to grant a license on an initial application or for failure to observe the terms of the license, Commission regulations, or the Atomic Energy Act. As indicated above, the licensee's action evinced a complete and careless disregard of NRC requirements and a lack of control over its licensed operation. Had the Commission known at the time the license application was received that the licensee would not adhere to the requirements of its license and NRC regulations, no license would have been issued. The Commission can no longer rely on this licensee to comply with NRC requirements.

In sum, the licensee's actions demonstrate that it is unable and unwilling to comply with NRC requirements, including those associated with basic radiation safety. Accordingly, public health and safety require issuance of an order to show cause why the license should not be revoked.

In view of the licensee's willful disregard of the Commission's requirements and lack of control of its licensed operation, the Director, Office of Inspection and Enforcement, has determined that no prior notice is required and pursuant to 10 CFR 2.202(a)(1), License Number 49-19585-01 should be suspended effective immediately pending further order.

III

Accordingly, pursuant to sections 81, 161b and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 30, IT IS HEREBY ORDERED THAT:

1. Effective immediately, the licensee's authorization under License Number 49-19585-01 to receive or use byproduct material is suspended, except as permitted in Condition 2 below;
2. Effective immediately, the licensee shall place all byproduct material in its possession in locked storage or transfer such material to a person authorized to receive the material; and

3. The licensee shall show cause, in the manner hereinafter provided, why its authorization under License Number 49-10585-01 to receive, possess and use byproduct material should not be revoked.

IV

The licensee may show cause, within 25 days after issuance of this Order, as required by Section III.C, above, by filing a written answer under oath or affirmation setting forth the matters of fact and law on which the licensee relies. The licensee may answer, as provided in 10 CFR 2.202(d), by consenting to the entry of an Order in substantially the form proposed in this Order to Show Cause. Upon failure of the licensee to file an answer within the specified time, the Director, Office of Inspection and Enforcement, may issue without further notice an Order revoking the license as described in Section III, above.

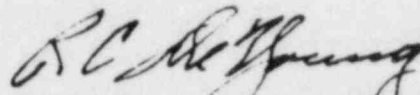
V

The licensee may request a hearing within 25 days after issuance of this Order. Any answer to this Order or any request for hearing shall be submitted to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555. A copy shall also be sent to the Executive Legal Director at the same address and to the Regional Administrator, NRC Region IV, 611 Ryan Plaza Drive, Suite 1000, Arlington, Texas 76011. A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF SECTION III OF THIS ORDER.

If a hearing is requested by the licensee, 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, on the basis of the matters set forth in section II of this Order, License No. 49-19585-01 should be revoked.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 13 day of October 1983



POST OFFICE BOX 912

CASPER, WYOMING 82602

November 15, 1983

United States Nuclear Regulatory Commission
Attn: Mr. Richard C. DeYoung
Washington, D.C. 20555

Dear Sir:

SUBJECT: RESPONSE TO SHOW CAUSE ORDER

In response to your letter of October 13, 1983, Perforating Services Inc. hereby seeks authority to retain possession of its byproduct material license #49-19585-01.

Perforating Services Inc. has contracted assistance from an outside source in rectifying all violations as outlined in section II of the show cause order. Gulf Nuclear Inc., 202 Medical Center Blvd., Webster Texas 77598, has agreed to furnish equipment, supplies, and technical assistance necessary to satisfy all N.R.C. requirements. A copy of a letter from Mr. E. H. Acree of Gulf Nuclear, Inc. is enclosed which details the equipment being shipped to Perforating Services, Inc.

Hopefully, this action will demonstrate our sincere desire to have our license reinstated and to comply with all N.R.C. requirements in the future.

Sincerely,

Charles B. Franklin

Enclosure

ALF



GULF NUCLEAR, INC.

202 MEDICAL CENTER BLVD. WEBSTER, TEXAS 77598 (713) 332-3581

November 11, 1983

Mr. Charles Franklin
Perforating Services, Inc.
P.O. Box 912
Casper, Wyoming 82602

Dear Mr. Franklin:

The following is a brief description of the various items that Gulf Nuclear, Inc. will provide to aid you with your safety program.

1. Two (2) leak test kits - Smear test your source (follow directions on kit); forward to Gulf Nuclear, Inc. for analysis.
2. G.M. survey meter-low level. Bicron, model "Surveyer"- scales 0-.5 mR/hr, 0-5 mR/hr., 0-50 mR/hr.
3. 4 - radioactive material signs for posting your storage area.
4. 4 - Yellow III labels for your shipping container and 4 copies of shippers declaration forms.
 - 1 - Example of a utilization log.
 - 1 - Example of a well site survey form.
5. You need a 7A certificate on the AmBe shipping container. I suggest (The source is a Gammitron Model AN-HP) you contact your vendor and they can supply a certificate for the container.
6. Gulf Nuclear, Inc. will provide quarterly dosimeter service for four individuals.
7. Your source vendor can supply a special form certificate for the AmBe source.

Mr. Charles Franklin
Perforating Services, Inc.
November 11, 1983
Page 2

8. Your source and container vendor can supply you with a (USA DOT 7A Type A) tag for the shipping container.

We believe that these items will aid in physical aspects of your problem. We suggest you review the violations and study those sections in 10CFR and 49CFR as indicated.

Please advise if we can be of further assistance.

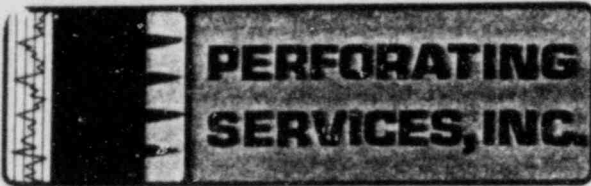
Sincerely,



Elick H. Acree,
President

Enclosures

EHA/bpq



POST OFFICE BOX 912

CASPER, WYOMING 82602

January 10, 1984

United States Nuclear Regulatory Commission
Attn: Mr. Richard C. DeYoung
Washington, D.C. 20555

Dear Sir:

Subject: Response to Show Cause Order

This letter will attempt to respond to each violation listed in your letter of October 13, 1983 as listed under Part II #1-9.

1. The sealed source has been leak tested and the swabs mailed to Gulf Nuclear for analysis.
2.
 - a. Radiation survey instruments have been obtained to perform required radiation surveys.
 - b. Personnel monitoring devices are now being provided to individuals working with licensed material.
 - c. The radiation protection officer is now fulfilling his duties such as conducting audits, to assure licensed activities are being conducted in compliance with NRC requirements.
 - d. Perforating Services, Inc. is now maintaining a utilization log for the use of licensed material.
 - e. Perforating Services, Inc. is conducting quarterly surveys of the areas where licensed material is stored.
 - f. Perforating Services, Inc. will conduct radiation surveys at the customer well sites where licensed material is used.
 - g. Perforating Services, Inc. now has a storage area for licensed material as described in the application.
3. Perforating Services, Inc. now has the licensed material stored in such a place to conform with 10 CFR 20.105 (b) (2). The licensed material does not now present a hazard in any unrestricted area.
4. Perforating Services, Inc. has made surveys of the unrestricted area to comply with the regulations in 10CFR Part 20.
5.
 - a. Shipping papers have now been provided for packages containing Type A quantities of radioactive material when transported on public highways in Wyoming


January 10, 1984

Page 2

- b. Perforating Services, Inc. has labeled the shipping container used for transporting a well-logging source with an appropriate radioactive yellow III label.
 - c. Perforating Services, Inc. does now possess the Specification 7A package certificate for Type A quantities of licensed material transported on public highways in Wyoming.
 - d. Perforating Services, Inc. does not yet possess the certification of Special Form Material transported on public highways in Wyoming. SIF-Geosource, the company that supplied our licensed material, is attempting to locate this certificate and will furnish it to us as soon as possible.
 - e. The package used to transport Type A quantities of radioactive material does now have the required markings ("USA DOT 7A Type A").
6. Perforating Services, Inc. now has on file in Gillette, Wy. current copies of specified regulations and the license.
 7. Perforating Services, Inc. has now provided instructions to individuals working in restricted areas of the precautions and procedures to minimize exposure to radiation.
 8. Perforating Services, Inc. has conspicuously posted the storage area with a sign bearing the radiation caution symbol and the words: Caution Radioactive Material.
 9. Records for receipt of a 5-curie americium-241 source are now available for inspection.

Perforating Services, Inc. feels it is now in full compliance with all NRC regulations and is ready for inspection at your earliest convenience. We assure the commission no more violations will be allowed to occur and we hereby seek authority to retain possession of a byproduct material license. Thank you.

Sincerely



Charles B. Franklin

ALF



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
FEB 28 1984

License No: 49-19585-01
EA 83-110

Perforating Services, Inc.
ATTN: Mr. Charles B. Franklin
P. O. Box 912
Casper, Wyoming 82602

Gentlemen:

Subject: Rescission of Suspension and Order Modifying License

We have reviewed your responses and commitments to the Order to Show Cause and Order Temporarily Suspending License dated October 13, 1983. In addition, we have taken into consideration results of an October 21, 1983 inspection and commitments made at the Enforcement Conference held between Mr. C. B. Franklin, representing Perforating Services, Inc., and Mr. R. E. Hall and other members of the NRC's Region IV staff at the NRC's field office in Denver, Colorado, on February 2, 1984.

After careful consideration of your responses and commitments, the Director, Office of Inspection and Enforcement, has determined that adequate cause has been shown and, therefore, the Order may be rescinded subject to the enclosed Rescission of Suspension and Order Modifying License. This decision is based upon the determination that you have made improvements in your programs to comply with license requirements, and that the specific plans, procedures and changes, as described in your responses, if implemented as described, are adequate to enable you to conduct future activities in compliance with Commission requirements. Please note that Section III of the enclosed Order requires you to comply with additional 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.

Sincerely,

A handwritten signature in dark ink, appearing to read "Richard C. DeYoung".

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Rescission of Suspension and
Order Modifying License

cc: Wyoming Dept. of Radiological
Health Services

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

PERFORATING SERVICES, INC.
P.O. Box 912
Casper, Wyoming 82601

)
)
)
)
)

License No. 49-19585-01
EA 83-110

RESCISSION OF SUSPENSION
AND ORDER MODIFYING LICENSE

I

Perforating Services, Inc., P.O. Box 912, Casper, Wyoming 82601 (the "licensee") is the holder of a specific byproduct material license issued by the Nuclear Regulatory Commission (the "NRC") pursuant to 10 CFR Part 30. The license, issued on June 4, 1981, and due to expire on June 30, 1986, authorizes the use, storage, and transfer of byproduct material as described in the licensee's application dated October 26, 1980, and letter dated May 10, 1981.

II

An inspection of the licensee's facility at Gillette, Wyoming, on September 28 and 30, 1983, by a representative of the NRC Region IV Office indicated that the licensee had conducted licensed activities in violation of certain NRC requirements. As a result of this inspection, an Order to Show Cause and Order Temporarily Suspending License, Effective Immediately, was issued to Perforating Services, Inc., on October 13, 1983.

An inspection of the licensee's facility on October 21, 1983, confirmed that licensed material had been secured and apparently had been stored in compliance

with the Order. The licensee responded to the Order on November 11, 1983, and January 10, 1984. Following receipt of these responses, the NRC concluded that supplementary information was necessary in order to determine whether the licensee would be able to use byproduct material in compliance with its license and NRC regulations. Therefore, an Enforcement Conference was held with the licensee at the NRC's field office in Denver, Colorado, on February 2, 1984. At this Enforcement Conference the licensee explained how Perforating Services, Inc. was now in full compliance with each of the requirements violated previously and that its Radiation Safety Officer would be taking a training course on well-logging safety to improve the quality of its radiation safety program.

On the basis of an evaluation of the licensee's responses, the results of the Enforcement Conference and the October 21, 1983 inspection, I have now determined the licensee has shown cause why License No. 49-19585-01 should not be revoked and has shown that, subject to the implementation of the proposed improvements in its licensed program and the conditions set forth in Section III, licensed activities can be performed in accordance with Commission requirements. Accordingly, I have determined that subject to these conditions and improvements, its license suspension may be rescinded.

III

In view of the foregoing and pursuant to sections 81, 161b and 1610 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 30, IT IS HEREBY ORDERED THAT:

1. The licensee shall conduct internal compliance audits on a quarterly frequency. These audits shall be conducted for 1 year and shall be performed by an independent consultant approved by the NRC Region IV staff. After each audit, a written report of the audit findings shall be documented and retained at the licensee's facility for future inspection by the NRC. Actions taken in response to the audit findings shall also be documented, reviewed by the licensee, and retained with the records of the audit.

2. The licensee shall send the Radiation Safety Officer by July 1, 1984 to a training course for well-loggers approved by the Region IV staff. This training course must cover the rules and regulations of the Commission and radiation safety requirements related to well-logging operations. In addition to the training course, each quarterly visit by an independent consultant shall provide for additional ongoing training. This training shall include source handling and storage within the facility and field site source handling operations. This training shall also consist of a review of the documentation and record-keeping requirements associated with the licensed program. A written report of the training given shall be documented and retained at the licensee's facility for future inspection by the NRC.

IV

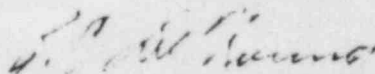
The licensee may request a hearing on this Order within 25 days of the date of its issuance. Any request for a hearing shall be addressed to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. A copy shall also be sent to the Executive Legal Director at the same address.

If a hearing is to be held, the Commission will issue an Order designating the time and place of any such hearing. If a hearing is held concerning this Order, the issue to be considered at the hearing shall be whether the licensee should comply with the requirements set forth in Section III of this Order.

The Order modifying license set forth in Section III shall become effective upon the licensee's consent or upon expiration of the time within which the licensee may request a hearing or, if a hearing is requested by the licensee, on the date specified in an Order issued following further proceedings on this Order.

The suspension of licensed activities imposed by the Order of October 13, 1983 is rescinded upon the effectiveness of the Order set forth in Section III.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 28 day of February 1984



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

March 2, 1984

Docket No. 030-05985
License No. 37-00276-25
EA 84-6

Pittsburgh Testing Laboratory
ATTN: M. Ruyan
President
850 Poplar Street
Pittsburgh, Pennsylvania 15220

Gentlemen:

Subject: Notice of Violation and Proposed Imposition of Civil Penalty
(NRC Inspection 84-01)

This refers to the NRC safety inspection conducted at your facility on January 10, 1984 of activities authorized by NRC License No. 37-00276-25. The report of this inspection was forwarded to you on January 20, 1984. The inspection was conducted following an employee's exposure of 3400 rems to his thumb from an x-ray device, which is in excess of the regulatory limits established by the Commonwealth of Pennsylvania which regulates the x-ray device. The NRC inspection was conducted because NRC-licensed radiography sources are also in your possession, and used in the same room that the excessive exposure to the x-ray beam occurred.

During the inspection, a violation of NRC requirements was identified. Specifically, two radiography rooms at the facility, both of which are used for both x-ray and isotope radiography, were not equipped with audible and visible alarms as required by 10 CFR 34.29. The purpose of these alarms is to alert individuals to the presence of radiation. The failure to maintain these alarms demonstrates a significant breakdown in your radiation safety program. The fact that the failure to install these alarms allowed such an exposure to an x-ray device demonstrates that there was a substantial potential for a similar exposure to a radiography source.

This violation is of significant concern to the NRC because it indicates a lack of management control and oversight of your radiation safety program. This concern was discussed with Mr. W. Levelius of your staff at an Enforcement Conference on January 31, 1984.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

During the past few years, the NRC and the Agreement States have identified many violations at Pittsburgh Testing Laboratory (PTL) facilities throughout the United States. For example, violations were identified by the NRC in 1982 at your facilities in Pittsburgh, Pennsylvania, Salt Lake City, Utah, and Brooklyn Heights, Ohio and several violations were identified by the State of Washington at your Seattle and Spokane facilities. In April 1982, the State of Washington found that at your Seattle, Washington facility, the installed visible and audible alarm system did not meet the specific requirements of the State of Washington regulations compatible with 10 CFR 34.29. Also, in November 1982, the State of Washington found that at your Spokane, Washington facility, the required visible and audible alarms were not installed, a violation identical to the recent violation at the Pittsburgh facility. Further, in February 1983, the State of Tennessee identified six violations at your Nashville facility. These violations, which were described by the State of Tennessee as having been "allowed and encouraged" by the PTL Nashville site management, included a violation similar to the recent violation identified at the Pittsburgh facility. Specifically, the State of Tennessee found that the required alarms were not installed at your Nashville facility. As a result of the six violations, the State of Tennessee suspended your Tennessee license and assessed a \$10,000 civil penalty on April 4, 1983.

To emphasize the importance of your responsibility for properly controlling licensed activities, particularly the control of radiography devices which have such a high potential for serious exposure to workers and members of the public, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Eight Thousand Dollars (\$8,000) for the violation set forth in the enclosed notice.

In accordance with Section B.2 of Supplement VI of the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, the violation has been categorized at Severity Level II because a system designed to prevent or mitigate a serious safety event was inoperable in that the alarms had not been installed. As a result, a substantial potential existed for an exposure to NRC-licensed material in excess of the NRC regulatory limits. The base civil penalty amount for a Severity Level II violation is \$6,400. This base civil penalty amount has been increased by 25% to \$8,000 because of the similar violations identified by the State of Washington in 1982 at your Seattle and Spokane facilities, and by the State of Tennessee in 1983 at your Nashville facility. These violations should have prompted you to take action to ensure that the required alarms were installed and operable at all PTL facilities, and such action would have provided you notice that a similar deficiency existed at your Pittsburgh facility.

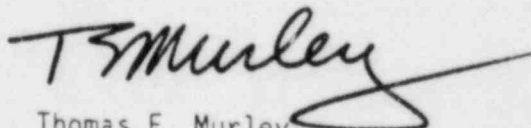
The NRC is deeply concerned about the many violations at PTL facilities throughout the United States. As a result, the Director of the Office of Inspection and Enforcement has decided that he would like to meet with you to discuss your responsibilities for management control and oversight of your licensed program. In the near future you will be informed of the time and place for the meeting.

You are required to respond to the enclosed notice and, in preparing your response, you should follow the instructions specified in the notice. In your response, you should provide the specific details for improving management control and oversight over your licensed program and the steps planned or undertaken to assure that your personnel understand and follow NRC requirements. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice", 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 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,



Thomas E. Murley
Regional Administrator, RI

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encls:
Commonwealth of Pennsylvania
State of Tennessee
State of Washington

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Pittsburgh Testing Laboratory,
Pittsburgh, Pennsylvania 15220

Docket No. 30-05985
License No. 37-00276-25
EA 84-6

On January 10, 1984, an NRC inspection was conducted at the Pittsburgh, Pennsylvania, facility of Pittsburgh Testing Laboratory (PTL) following an employee's exposure of 3400 rems to his thumb from an x-ray device, which is in excess of regulatory limits established by the Commonwealth of Pennsylvania. Certain audible and visible alarms, which warn of the presence of radiation and which were required to be installed at the time the exposure occurred, were not operable. Although the x-ray devices at PTL are regulated by the Commonwealth of Pennsylvania, the NRC inspection was conducted to determine if a potential existed for personnel exposures from NRC-licensed radiography sources used in the same area where the x-ray exposure occurred. During the inspection, it was determined that radiography involving the use of NRC-licensed sources is conducted in the same areas, and alarms required by NRC regulations were not installed.

The failure to install these alarms demonstrates a significant breakdown in management control and oversight of the licensee's radiation safety program. To emphasize the importance of control of licensed activities, particularly the control of radiography devices which have a high potential for serious exposure to workers and members of the public, the Nuclear Regulatory Commission proposes the imposition of a civil penalty in the amount of Eight Thousand Dollars (\$8,000) for this violation. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, this particular violation and the associated civil penalty are set forth below:

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 signals to warn of the presence of radiation. The visible signal must be actuated by radiation whenever the source is exposed and the audible signal must be actuated when an attempt is made to enter the installation while the source is exposed.

Contrary to the above, on January 10, 1984, two permanent radiographic installations located in the licensee's Pittsburgh facility did not have the visible or audible signals to warn of the presence of radiation.

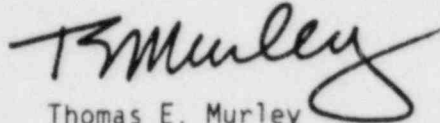
This is a Severity Level II violation. (Supplement VI)
Civil Penalty - \$8,000

Pursuant to the provisions of 10 CFR 2.201, Pittsburgh Testing Laboratory, is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, with a copy to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps that will be 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. 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, Pittsburgh Testing Laboratory may pay the civil penalty in the amount of Eight Thousand Dollars or may protest imposition of the civil penalty in whole or in part by a written answer. Should Pittsburgh Testing Laboratory fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalty in the amount proposed above. Should Pittsburgh Testing Laboratory elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer 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 contained in Section IV.B of 10 CFR Part 2, Appendix C 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 by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of Pittsburgh Testing Laboratory 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 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 penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 2 day of March 1984

M. Y. RUYAN, P. E.
President
Chief Executive Officer



**Pittsburgh
Testing
Laboratory**

EXECUTIVE OFFICES

March 20, 1984

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

Re: Notice of Violation and Imposition of
Civil Penalty (NRC Inspection 84-01)
Docket No.: 30-05985
License No.: 37-00276-25
EA 84-6

Gentlemen:

This is in response to subject notice dated March 2, 1984.

1. Admission

Pittsburgh Testing Laboratory (PTL) admits the violation.

2. Reasons For The Violation

PTL's Pittsburgh Non-Destructive Testing Department contains 3 rooms for Radiography and storage consisting of:

- a) Gamma Radiography (Exterior Building)
- b) X-Ray Radiography
- c) Storage of Radiographic Sources/Cameras

The exterior Gamma Radiography room had been properly equipped with all required safety instrumentations and has been in full compliance with NRC requirements.

X-Ray Radiography room was adequately equipped to comply with State requirements for safety instrumentation.

The incident occurred because the interlock current control for the x-ray machine was not connected. This was due to a changeover in machines and was an oversight on our part to have the new machine connected.

Director
March 20, 1984
Page No. 2

Storage room did not require safety instrumentation, only requirement being proper identification through "Radioactive Materials" sign.

The X-Ray room and the storage room on occasion were utilized for radiography and as a result NRC regulations were violated.

3. Corrective Steps Taken

Both the x-ray and storage rooms now have audio/visual systems installed and operating. When the source is exposed, visual lights are on inside and outside the room. If the door is opened while the source is exposed, an audio alarm sounds.

4. Corrective Steps Taken to Avoid Further Violations

We have reviewed all our facilities for compliance to NRC Regulations regardless whether or not facilities are located in Agreement States. We have directed all districts to cease inhouse radiographic operations until such time when shooting cells are built and instrumented in full compliance with NRC regulations. We have obtained signed acknowledgements from Districts involved to assure same.

5. Date When Full Compliance is Achieved

As of this date full compliance have been achieved.

STATE OF PENNSYLVANIA
COUNTY OF ALLEGHENY

Sworn to and subscribed before
me this 20th day of MARCH 1984

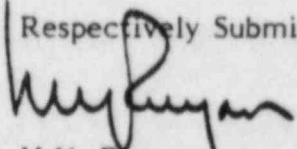
Clarence J. Threlk

CLARENCE J. THRELK, NOTARY PUBLIC
GREEN TREE BORO, ALLEGHENY COUNTY
MY COMMISSION EXPIRES JULY 22, 1986
Member, Pennsylvania Association of Notaries

Enclosure: Check No. 88733

MYR/bm

cc: Thomas E. Murley
Regional Administrator RI
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Respectfully Submitted,

M.Y. Ruyan
President

M. Y. RUYAN, P.E.
President
Chief Executive Officer



**Pittsburgh
Testing
Laboratory**

EXECUTIVE OFFICES

March 20, 1984

Thomas E. Murley
Regional Administrator R1
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Re: Notice of Violation and Civil
Penalty NRC Inspection 84-01

Dear Mr. Murley:

Attached please find copy of our response to subject addressed to Director, Office of Inspection and Enforcement USNRC, Washington, DC 20555.

I would like to assure that we consider this matter to be of a very serious nature. Since the Enforcement Conference held on January 31, 1984 with our Mr. W.H. Levelius, at King of Prussia I have decided to be directly involved until such time when an acceptable confidence level is achieved. Following are some of the steps taken towards this end.

On February 8, 1984 this matter was discussed in detail in Pittsburgh with our four Regional Vice Presidents, who will increase their involvement and efforts towards compliance.

On February 14, 1984 a memo was sent to our VP's confirming same.

On March 9, 1984 our Districts were notified of the pending fine and the seriousness of the matter was indicated.

On March 13, 1984 memos were sent confirming verbal directives sent to cease all in-house radiographic functions until full compliance is achieved, through a fully instrumented shooting cell. These letters were acknowledged in writing.

On March 20 copies of NRC notice, our reply and a directive for full compliance to NRC requirements were mailed to all districts.

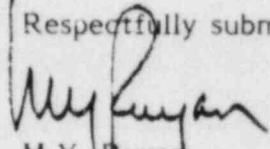
Mr. Murley, in the light of the violation it may be difficult to convince you of our long term commitment to radiation safety. We do agree that

Thomas E. Murley
March 20, 1984
Page No. 2

a certain degree of upgrading is needed in our operation and towards this end we are taking the following steps.

1. PTL's "Radiographic Personnel Operating & Emergency Procedures" is being revised, simplified and upgraded where required.
2. Internal safety inspections by the Pittsburgh Radiation Department shall be followed up by Regional VP's on a continuing manner for verification of corrective action.
3. Our Radiation Safety documents shall be computerized. A computer for this purpose has been purchased.
4. Our Refresher Training Program shall be reviewed and reinforced.
5. Our Radiation Safety organization shall be re-evaluated and shall be modified and/or changed if needed.

Respectfully submitted,



M.Y. Ruyar
President

MYR/bm



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
795 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

OCT 20 1983

License No. 12-16941-01
EA 83-102

Professional Service Industries,
Incorporated
ATTN: Mr. Robert Pfister
Executive Vice President
1000 Jorie Boulevard, Suite 34
Oak Brook, IL 60521

Gentlemen:

This refers to the NRC safety inspection conducted on July 20, 26, 29, and August 3 and 4, 1983, of activities authorized by NRC License No. 12-16941-01. During the inspection, eight examples of failure to comply with NRC requirements were identified. The results of the inspection were discussed on August 26, 1983, during an enforcement conference in the Region III office in Glen Ellyn, Illinois between Messrs. Pfister, Thomas, Lewis, and Knudsen of your staff and Mr. A. B. Davis and others of the NRC staff.

These examples are described in the attached Notice and they collectively represent a significant breakdown in management oversight and control of your radiation safety program. These examples demonstrate the need for improvement in the administration and control of the program to ensure adherence to NRC requirements and safe performance of licensed activities.

To emphasize the importance of these matters and the need to ensure implementation of effective management control over the radiation safety program, I have been authorized, after consultation with the Director of the Office of Inspection and Enforcement, to issue the attached Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Two Thousand Dollars for the violations set forth in the attached Notice. The violations have been categorized in the aggregate as a Severity Level III problem in accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C. Civil Penalties of Two Thousand Dollars have been proposed. This is higher than the base civil penalty usually proposed for Severity Level III violations by licensees conducting similar operations because of the significance of the administrative breakdown which led to the use of material by an individual not trained or authorized for its use, the duration of the violations surrounding such use before discovery and your comparative size for a licensee of this type.

You are required to respond to this letter and should follow the instructions in the Notice when preparing your response. You should also give particular attention to those actions that will be taken by management to ensure that, in the future, licensed material will be used by authorized individuals. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

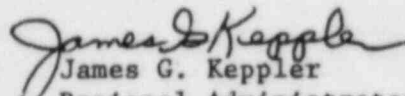
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

OCT 20 1983

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 enclosure will be placed in the NRC's Public Document Room.

The responses directed by this letter and the accompanying 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 G. Keppler
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalties

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Professional Service Industries,
Incorporated
1000 Jorie Boulevard, Suite 34
Oak Brook, Illinois

License No. 12-16941-01
EA 83-102

During the NRC inspection on July 20, 26, 29, and August 3 and 4, 1983, eight examples of failure to comply with NRC requirements were identified. One of the most significant violations involved the use of a nuclear moisture density gauge by an individual who was not trained or authorized to use licensed byproduct material.

To emphasize the importance of these matters and the need to ensure implementation of effective management control over the radiation safety program, the NRC proposes to impose civil penalties in the cumulative amount of Two Thousand Dollars. In accordance with the General Policy and Procedure for NRC Enforcement Actions (10 CFR Part 2, Appendix C), 47 FR 9987 (March 9, 1982), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violations and associated civil penalties are set forth below:

- A. 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(17), an unrestricted area is any area access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above, unsecured licensed material was stored in unrestricted areas. Specifically, between March 11, 1983 and July 20, 1983, an employee of the licensee stored a Troxler 3401B nuclear moisture density gauge containing 10 millicuries of cesium-137 and 50 millicuries of americium-241 in his automobile, in his bedroom, and in basement areas of his residence.

- B. License Condition No. 12 states that licensed material shall be used by or under the supervision of individuals who have attended the licensee's training course and who have been designated by the Radiation Protection Officer.

Contrary to this requirement, an unsupervised, technically unqualified employee used licensed material. Specifically, this individual, who had not taken the licensee's training course, operated a Troxler 3401B nuclear moisture density gauge during a one week period beginning March 11, 1983.

- C. License Condition No. 24 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in the application dated August 16, 1981.

Item No. 12 of the application states that film badges will be issued monthly and will be used for monitoring employees using licensed material.

Contrary to the above, an individual operated a Troxler 3401B nuclear moisture density gauge during the week of March 11, 1983, and was not wearing a film badge during that time.

- D. License Condition No. 22 requires that a physical inventory of all sealed sources received and possessed under the license be performed every six months.

Contrary to the above, the licensee failed to conduct inventories every six months as required. Specifically, inventories of sealed sources were not performed from January 1982 to June 1983, a period greater than six months. In addition, neither of the above mentioned inventories were carried to completion. The 1982 inventory was not performed at 6 of 17 facilities and the 1983 inventory has not been performed at 12 of 17 facilities located in Region III.

- E. 10 CFR 20.101(a) limits the whole body dose to an individual in a restricted area to 1.25 rems per calendar quarter, except as provided by 10 CFR 20.101(b). Paragraph (b) allows a whole body dose of three rems per calendar quarter provided certain conditions are met.

Contrary to this requirement, an individual working in the Detroit, Michigan facility received a whole body dose of 1.74 rems during the third quarter of 1979. Furthermore, an individual working in the East Peoria, Illinois facility received a whole body dose of 1.59 rems during the second quarter of 1981 and the conditions of paragraph (b) were not met.

- F. 10 CFR 20.405(a) requires that, within 30 days, the licensee make a written report to the Commission concerning each exposure to radiation in excess of any applicable limit in 10 CFR Part 20 or in the license. 10 CFR 19.13(d) requires that the licensee make a written report of such exposures to the individuals exposed.

Contrary to these requirements, the licensee failed to report to the Commission, and to the individuals exposed, the exposures occurring in 1979 and 1981 as noted in the previous item.

- G. 10 CFR 71.5(a) requires that no licensee shall transport any licensed material outside the confines of his plant or other place of use unless the licensee complies with the applicable regulations of the Department of Transportation in 49 CFR Parts 170-189.
- a. 49 CFR 173.394(a) states that Type A quantities of special form radioactive materials must be packaged in Specification 7A, Type A, general packaging.

Contrary to the above, nuclear moisture density gauges were not always transferred in Specification 7A, Type A, general packaging. Specifically, a Troxler nuclear moisture density gauge used at the Hillside, Illinois facility was transferred numerous times from March 11, 1983 to July 20, 1983, without being packaged in Specification 7A, Type A, general packaging.

- b. 49 CFR 177.817 states that a carrier may not transport hazardous material unless it is accompanied by a shipping paper that is prepared in accordance with the regulations.

Contrary to the above, hazardous material was routinely transferred without the required shipping papers. Specifically, a Troxler nuclear moisture density gauge used at the Hillside, Illinois facility was transported without the required shipping papers numerous times from March 11, 1983 to July 20, 1983.

- H. 10 CFR 30.3 requires that the licensee receive, possess and use byproduct material only as authorized by the license. Condition No. 7 of the license limits the possession of licensed material to specific sealed source models.

Contrary to the above, on July 20, 1983, the licensee possessed two sealed sources containing byproduct material that were not authorized by the license. Specifically, unauthorized 10 millicurie cesium-137 and 50 millicurie americium-241 sealed sources were possessed in a Soiltest NIC-5DT nuclear moisture density gauge at the licensee's Hillside, Illinois facility.

Collectively, the above eight violations have been evaluated as a Severity Level III problem (Supplements IV, V, and VI).

(Cumulative Civil Penalty - \$2,000 - assessed equally among the eight violations).


Pursuant to the provisions of 10 CFR 2.201, Professional Service Industries, Incorporated is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, with a copy to the Regional Administrator, USNRC, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of this Notice, a written statement or explanation in reply, including 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. 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.

OCT 20 1983

Within the same time as provided for the response required above under 10 CFR 2.201, Professional Service Industries, Incorporated may pay the civil penalties in the cumulative amount of Two Thousand Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should Professional Service Industries, Incorporated fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties in the amount proposed above. Should Professional Service Industries, Incorporated elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer 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, in whole or in part, such answer may request remission or mitigation of the penalties. In requesting mitigation of the proposed penalties, the five factors contained in Section IV(B) of 10 CFR Part 2, Appendix C 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 statements or explanations by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Professional Service Industries, Incorporated's attention 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 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, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION


James G. Keppier
Regional Administrator

Dated at Glen Ellyn, Illinois
this 19 day of October 1983



Professional Service Industries, Inc.
Corporate Office

November 18, 1983

United States Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Attention: Mr. James G. Keppler

Re: License Number 12-16941-01

Gentlemen:

This correspondence is written in reference to your letter of October 20, 1983. PSI appreciates the opportunity to respond to the items found to be in violation during the recent NRC inspection. Each particular violation will be addressed point by point.

- A) In regards to violation of 10 CFR 20.207 (a), gauges are to be stored in restricted-secured areas. A monetary system of fines has been established (as seen on the enclosed PSI Guideline of Disciplinary Action) to give our employees the impetus needed for conformity to this item. This system will be enforced and verified in a bi-annual inspection by the appropriate Region Manager and reported, in writing, to the Corporate Radiation Safety Officer. A copy of the Inspection Form has been enclosed for your review.
- B) According to License Condition Number 12, non-certified personnel are not and will not be allowed to use moisture-density gauges. In order to enforce this condition, PSI has included it in our Guideline for Disciplinary Action (attached). The penalty for this offense is termination.

The manager held accountable for the violation of License Condition Number 12 has been terminated. This action should serve as an example to all PSI managers that our disciplinary program will be enforced. This will also be checked by the Region Manager during his bi-annual inspection.

- C) According to License Condition Number 24, Item Number 12, all personnel associated with moisture density gauges must wear film badges. As each employee passes their examination a film badge is automatically set up. This also will be checked during the Region Manager's inspections. Adherence to item B above will eliminate this problem.
- D) License Condition Number 22 requires inventories to be done every six (6) months, however, PSI has requested three (3) month inventories. As can be seen on the Disciplinary Guide, fines have also been established for late reporting. We are confident that personal monetary fines will provide an impetus for timely reporting at all levels.

- E) The overexposures listed occurred prior to the current Corporate Radiation Safety Officer's administration. We are aware of the limits and adhere to them as evidenced by our recent performance.
- F) Again, nonconformity of 10 CFR 20.405 (a) occurred in the administration of the previous Corporate Radiation Safety Officer. We are knowledgeable about our responsibilities in the event of exposures in excess of the applicable limit and will adhere to those responsibilities.
- G) According to 49 CFR 173.394 (a) all gauges will be transported in their type A cases. This will be followed up by inspection from the Region Manager.

PSI has put into operation a "Gauge Information Packet" program. Each gauge was made a plastic pouch with all needed information and shipping papers to be kept in the gauge case (sample attached). This also will be inspected by the Region Managers.

Also to ensure use of "Utilization Logs" PSI is requiring each branch to furnish the Corporate Office with copies bi-monthly.

- H) The Soiltest NIC-5DT gauge has been returned to the manufacturer's representative for disposal (see enclosed).

As stated we have initiated a bi-annual inspection of each office by the Region Managers. Their inspection form is attached. The Region Manager will report all findings directly to the Corporate Radiation Safety Officer.

In conclusion, we feel that the enactment of the PSI "Guideline of Disciplinary Action" program, will assure timely and accurate reporting and response to the Oak Brook Corporate Office. However, your response to the adequacy of this program is requested and if additional measures appear necessary please advise.

I would like to point out that PSI has cooperated fully with NRC personnel, enthusiastically adopted new procedures, and would like to continue working with the NRC to further improve our system. In view of this, we would like to request a reduction in our fine since violation designation H has been corrected, and violations E and F occurred some time ago.

We are most anxious to comply with all NRC regulations and would appreciate your input or suggestions.

Very truly yours,

PROFESSIONAL SERVICE INDUSTRIES, INC.


Robert K. Pfister
Executive Vice President

PROFESSIONAL SERVICE INDUSTRIES, INC.

GUIDELINE OF DISCIPLINARY ACTION

Related to Nonconformance of S.O.P. #F-98

Nonconformance Action

Corporate Reaction

Allowing non-certified personnel to use radioactive equipment in other than supervised training.

Branch Manager dismissed.

Allowing gauges to be stored in an unrestricted-unsecured area.

Branch Manager - \$100.00 fine.

Nonperformance of Leak Tests and not forwarding Form RA-IV to the Corporate Radiation Safety Officer within five (5) working days of the end of the test month.

A warning letter will be sent to the Branch Manager with copies to the Division and Region Managers.

If after ten (10) working days from the date of above warning letter the RA-IV form is still not received by the Corporate Radiation Safety Officer...

Branch Manager - \$25.00 fine.

The above fine is repeated each ten (10) days the RA-IV form is not received by the Corporate Radiation Safety Officer.

Not furnishing the Corporate Office with the proper PSI gauge transfer forms:

By the Shipping and/or Receiving Office:

One month after shipping date...

Branch Manager - \$25.00 fine and letter to Division Manager.

Two months after shipping date...

Branch Manager - \$50.00 fine.
Division Manager - \$25.00 fine and letter to Region Manager.

Three months after shipping date...

Branch Manager - \$100.00 fine.
Division Manager - \$50.00 fine.
Region Manager - \$25.00 fine.

Nonconformance Action

Corporate Reaction

Non-submittal of Utilization Log Summary to Corporate Radiation Safety Officer within ten (10) working days of cut off, date which will be the 15th and last day of each month.

Warning letter sent to Branch Manager with copies to Division and Region Manager.

20 days after cut off date...

Branch Manager - \$25.00 fine and letter to Division Manager.

30 days after cut off date...

Branch Manager - \$50.00 fine.
Division Manager - \$25.00 fine and letter to Region Manager.

40 days after cut off date...

Branch Manager - \$100.00 fine.
Division Manager - \$50.00 fine.
Region Manager - \$25.00 fine.

Non-response to Oak Brook correspondence (quarterly inventory, response to inspection nonconformities, etc.) by the date indicated on that correspondence.

Branch Manager - \$25.00 fine with letter copied to Division and Region Manager.

Each fifteen (15) days after the original response date...

Branch, Division and Region Managers - \$50.00 fine.

Non-submittal of film badges to processing company within 30 days of the appropriate interval.

Branch Manager - \$25.00 fine for each 30 days.

Summary - Each managers performance will be monitored. A copy of all disciplinary letters and monetary fines will be maintained in the employee personnel file which will be checked each time a letter or fine is entered. If more than five entries are made during a three year period, the employee will be terminated. The employee file will be audited every three years and if no entry has been made during the last one year, the employees record will be cleared. All fines will be deducted from the employees payroll check by the Corporate Office Accounting Departement.



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

DEC 19 1983

License No. 12-16941-01
EA 83-102

Professional Service Industries, Incorporated
ATTN: Mr. Robert Pfister
Executive Vice President
1000 Jorie Boulevard, Suite 34
Oak Brook, IL 60521

Gentlemen:

This is in response to your letter dated November 18, 1983, answering the Notice of Violation and Proposed Imposition of Civil Penalties sent to you with our letter dated October 20, 1983. Our letter concerned violations found during a safety inspection conducted at your facilities on July 20, 26, 29 and August 3 and 4, 1983.

After careful consideration of your response, we have concluded for the reasons given in the enclosed Order and Appendix that the violations did occur as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties, and you did not provide a sufficient basis for mitigation of the proposed penalty. Accordingly, we hereby serve the enclosed Order on Professional Service Industries, Incorporated imposing civil penalties in the amount of Two Thousand Dollars (\$2,000).

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

Sincerely,

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosures:

1. Order Imposing Civil Monetary Penalties
2. Appendix, Evaluation and Conclusions

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

Professional Service Industries,
Incorporated
1000 Jorie Boulevard, Suite 34
Oak Brook, IL 60521

)
)
)
)
)

License No. 12-16941-01
EA 83-102

ORDER IMPOSING CIVIL MONETARY PENALTIES

I

Professional Service Industries, Incorporated (the "licensee") is the holder of Byproduct Material License No. 12-16941-01 (the "license") issued by the Nuclear Regulatory Commission (the "Commission") which authorizes the use of gauges to measure properties of materials. The license was issued on May 20, 1982 and expires on May 31, 1987.

II

As a result of an inspection conducted on July 20, 26, 29, and August 3 and 4, 1983 by the Nuclear Regulatory Commission's Region III Office, the NRC staff determined that the licensee had not conducted its activities in full compliance with NRC requirements. The NRC served on the licensee a written Notice of Violation and Proposed Imposition of Civil Penalties by letter dated October 20, 1983. The Notice stated the nature of the violations, the provisions of the Nuclear Regulatory Commission's requirements that the licensee had violated and the cumulative amount of the proposed civil penalties. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalties with a letter dated November 18, 1983.

III

Upon consideration of the Professional Service Industries, Incorporated response (November 18, 1983) and the statements of fact, explanation, and arguments for remission or mitigation of the proposed civil penalties contained therein as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined 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 (42 U.S.C. 2282, PL 96-295), and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay civil penalties in the cumulative amount of Two Thousand Dollars 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 of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

V

The licensee may, within 30 days of the date of this Order, request a hearing. A request for a hearing shall be addressed to the Director, Office of

Inspection and Enforcement. A copy of the hearing request shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555. If a hearing is requested, the Commission will issue an Order designating the time and place of hearing.

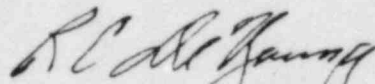
Should the licensee fail to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings and, if payment has not been made by that time, the matter may be referred to the Attorney General for collection.

VI

In the event the licensee requests a hearing as provided above, the issues to be considered at such a 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, and
- (b) Whether on the basis of such violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 9th day of December 1983

APPENDIX

EVALUATIONS AND CONCLUSIONS

The violations and associated civil penalties are identified in the Notice of Violation and Proposed Imposition of Civil Penalties dated October 20, 1983. The violations generally concerned the improper control, use, possession and shipment of radioactive byproduct material and the failure to prevent and report overexposures to radiation. The Office of Inspection and Enforcement's evaluation and conclusion regarding the licensee's response dated November 18, 1983 are presented below:

A. Evaluation of Licensee's Response

In the response, the licensee admits that each violation occurred as described in the Notice of Violation. The licensee requests mitigation of the proposed civil penalty because corrective actions were taken upon notification of one violation involving unauthorized possession of sealed sources and because two violations involving overexposures occurred more than two years ago under the administration of another Corporate Radiation Safety Officer.

The General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, Section IV.B.2, allows mitigation of a civil penalty for unusually prompt and extensive corrective action. The NRC realizes that the licensee disposed of the unauthorized sources within approximately two weeks after notification by NRC inspectors that possession of two sealed sources was unauthorized. This corrective action is, however, of the type considered by the NRC to be normal and expected, not unusually prompt or extensive.

In addition, the NRC would have expected the licensee to have taken more effective measures to recover the lost source once it was discovered to be missing. Instead, the NRC determined through an inspection that the source was at the home of a Professional Services, Inc. employee.

The NRC also recognizes that the two overexposures discovered by the NRC inspectors occurred before the current Radiation Safety Officer's administration. Although it appears the licensee is now evaluating and reporting overexposures as required, the failures to report the two previous overexposures were violations for which the licensee is responsible. A civil penalty is appropriate for these as well as the other violations specified in the Notice of Violation to deter similar noncompliance in the future.

B. Conclusion

While the NRC encourages corrective actions of the type described in the licensee's response, the licensee has not provided a sufficient basis for mitigation of the proposed civil penalties.



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

OCT 13 1983

License No. 37-21014-01
EA 83-112

Roof Auditing Services
ATTN: Robert B. Marks
President
P. O. Box 22
Oreland, PA 19075

Gentlemen:

SUBJECT: ORDER TO SHOW CAUSE AND ORDER TEMPORARILY SUSPENDING LICENSE
(EFFECTIVE IMMEDIATELY)

Enclosed is an Order, effective immediately, suspending your byproduct material license and directing you to show cause why your license should not be revoked. The Commission is also considering whether further enforcement actions are appropriate.

In accordance with 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 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,

A handwritten signature in cursive script, appearing to read "R. C. DeYoung".

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Order to Show Cause and Order Temporarily
Suspending License (Effective Immediately)

cc: Commonwealth of Pennsylvania
Bureau of Radiological Health

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
ROOF AUDITING SERVICES)
P. O. Box 22)
Oreland, Pennsylvania 19075)

License No. 37-21014-01
EA 83-112

ORDER TO SHOW CAUSE
AND ORDER TEMPORARILY SUSPENDING LICENSE
EFFECTIVE IMMEDIATELY

I

Roof Auditing Services, P. O. Box 22, Oreland, Pennsylvania, 19075 (the "Licensee") is the holder of a specific byproduct material license issued by the Nuclear Regulatory Commission (the "Commission") pursuant to 10 CFR 30. The license, issued on June 4, 1982, and due to expire on June 30, 1987, authorizes the use, storage, and transfer of byproduct material as stated in the Licensee's application dated March 22, 1982 and letter supplementing that application dated May 27, 1982.

II

In a byproduct material application dated March 22, 1982, the Licensee requested a license to possess a moisture gauge containing americium-241. By letter dated May 20, 1982, the Licensee was informed that the license could not be issued unless additional commitments and descriptions were submitted in support of the application. In a letter dated May 27, 1982, the Licensee provided the

requested information. Specifically, the Licensee stated that a named individual would be the designated user of byproduct material, the named individual had completed a manufacturer's training course in the use of moisture gauges containing byproduct material, film badges would be obtained and exchanged monthly, the moisture gauge would be stored and secured in a cinder block and concrete garage located about 500 feet from where people work, and every six months leak testing of the sealed source would be accomplished by using a commercial leak test kit. License Number 37-21014-01 was subsequently issued on June 4, 1982 and incorporated these commitments as requirements by Condition 17 of the license.

In a letter dated September 9, 1983, the sole individual named on the license as authorized to use the gauge containing byproduct material informed the Commission that he was no longer employed by the Licensee. The named individual requested that his name be deleted from License Number 37-21014-01.

III

As a result of this disclosure, an NRC inspector visited the Licensee's facility at 4 Red Oak Road, Oreland, Pennsylvania, on October 6, 1983. An individual at this address informed the NRC inspector that the Licensee's president was not at the facility. The NRC inspector requested admittance to inspect the gauge. The individual denied the inspector admittance and stated that the moisture gauge was not at the location but was being used at a job site.

Contact with the Licensee's president was made at approximately 6:30 p.m. on October 6, 1983. Arrangements were made during a return call at 8:15 a.m. on October 7, 1983 for an inspection of the gauge and review of records at 10:30 a.m. on October 7, 1983.

The results of this inspection indicated that the moisture gauge had been in use since the departure of the sole named individual authorized to use the source. Based on an initial review of the inspection findings, the following violations have been identified:

1. License Condition 12, requires that licensed material be used by, or under the supervision and in the physical presence of, a single named individual.

Contrary to this requirement, from September 9, 1983 to October 6, 1983 licensed material was used by individuals not named on the license and the named user was not physically present and had left the employment of the licensee.

2. License Condition 17 requires, in part, that licensed material be stored in a cinder block and concrete garage located 500 feet from where people work.

Contrary to this requirement, as of October 7, 1983, the licensed material was stored in a garage that is an integral part of the residence. There is no cinder block and concrete garage located away from the facility at the storage address listed on the license.

3. License Condition 17 requires, in part, that the Licensee use film badges supplied by a specific film badge supplier.

Contrary to this requirement, as of October 7, 1983, the Licensee has not used film badges supplied by the specified supplier nor could the Licensee produce any evidence that film badges had ever been procured or used.

During the inspection, the inspector also found that the Licensee did not currently have any employees who had completed training given by the manufacturer of the gauge. The Licensee's president also stated that the cinder block and concrete garage described in the May 27, 1983 letter referenced in the license is located at a different location. Although the Licensee's president apparently understood NRC requirements, he had neglected to take action to ensure compliance with these requirements.

IV

Under Section 186 of the Atomic Energy Act of 1954, as amended, a license may be suspended or revoked for a finding which would warrant the Commission to refuse to grant a license on initial application. As stated above, on

October 7, 1983, the Licensee had neither the personnel nor the storage facilities described in a letter dated May 27, 1982. Had the Commission known at the time the license was applied for that the moisture gauge would be used by persons not authorized by the license and that the Licensee would not implement its license conditions, no license would have been issued. The Commission can no longer rely on this Licensee to comply with Commission requirements.

In sum, the Licensee's actions demonstrate that it is unable or unwilling to comply with Commission requirements, including those associated with basic radiation safety. Accordingly, the public health and safety requires issuance of an Order to Show Cause why the Licensee's specific license to use byproduct material should not be revoked. NRC Enforcement Policy, 10 CFR Part 2, Appendix C, IV.C.

In view of the Licensee's willful noncompliance with the Commission's requirements and current inability to come into compliance, I have determined that no prior notice is required and, pursuant to 10 CFR 2.202(f), License No. 37-21014-01 should be suspended effective immediately pending further order.

V

Accordingly, pursuant to Sections 81, 161b and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 30, IT IS HEREBY ORDERED THAT:

- A. Effective immediately, the Licensee's authorization under License No. 37-21014-01 to receive or use byproduct material is suspended, except as permitted in Condition B below;
- B. Effective immediately, the Licensee shall place all byproduct material in its possession in locked storage or transfer such material to a person authorized to receive the material; and
- C. The Licensee shall show cause, in the manner hereinafter provided, why License No. 37-21014-01 should not be revoked.

VI

The Licensee may show cause, within 25 days after issuance of this Order, as required by Section V.C., above, by filing a written answer under oath or affirmation setting forth the matters of fact and law on which the Licensee relies. The Licensee may answer, as provided in 10 CFR 2.202(d), by consenting to the entry of an order in substantially the form proposed in this Order to Show Cause. Upon failure of the Licensee to file an answer within the specified time, the Director, Office of Inspection and Enforcement, may issue without further notice an order revoking the license.

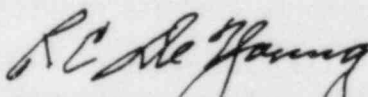
VII

The Licensee may request a hearing within 25 days after issuance of this Order. Any answer to this Order or any request for hearing shall be submitted to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Copies shall also be sent to the Executive Legal Director at the same address and to the Regional Administrator, Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406. A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF SECTIONS V.A AND V.B OF THIS ORDER.

If a hearing is requested by the Licensee, 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, on the basis of the matters set forth in this Order,
License No. 37-21014-01 should be revoked.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 13 day of October 1983

McGLINCHEY AND McGLINCHEY
Attorneys at Law
HOME UNITY SAVINGS ASSOCIATION BUILDING
1401 BRUCE ROAD
ORELAND, PENNSYLVANIA 19078
215-688-6063

Edward J. McGlinchey, Esquire
Edward J. McGlinchey, Jr. Esquire

BUCKS COUNTY OFFICE
908 WEST COUNTY LINE ROAD
WARMINSTER, PA. 18974-0210
215-672-2833

November 15, 1983

United States Nuclear Regulatory Commission
Office of Public Affairs, Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Re: Roof Auditing Services
Robert B. Marks, President
P. O. Box 22
Oreland, Pennsylvania 19075

Attention: Mr. John Glenn

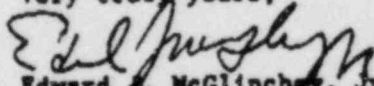
Dear Mr. Glenn:

As per our conversation on November 14th, this letter will confirm the fact that you will get together a list of authorized users and submit it to Mr. Marx. My client has obtained a dead-bolt for the storage area and is ordering film badges from the R. S. Landauer, Jr. and Company and is in the process of obtaining names of authorized inspectors and expects to train one of the members of his Company within the month. My client also is going to attend training school, however, he is not sure of the date he intends to start.

I appreciate the opportunity that you afforded to us to have a meeting on October 13, 1983. It cleared up a lot of misunderstandings that my client had and afforded him the opportunity to clear up the deficiencies. It is my opinion that this meeting effectively put the Order to Show Cause on hold and allows my client to continue in his business after the corrected violations are inspected by the Nuclear Regulatory Commission.

Thank you!

Very truly yours,


Edward J. McGlinchey, Jr., Esquire

cc: Jay G. Gutierrez

mhd

McGLINCHEY AND McGLINCHEY

Attorneys at Law

320 PENNSYLVANIA AVENUE
ORELAND, PENNSYLVANIA 19075

215-885-6063

Edward J. McGlinchey, Esquire
Edward J. McGlinchey, Jr. Esquire

BUCKS COUNTY OFFICE
909 WEST COUNTY LINE ROAD
WARMINSTER, PA. 18974-0516
215-674-4644

December 8, 1983

Mr. Richard C. DeYoung, Director
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, D. C. 20555

Re: License No. 37-21014-02
EA 83-112

Dear Mr. DeYoung:

In reply to your letter of November 25, 1983 I would like to first state that Mr. Marks had failed to properly read the Nuclear Regulatory Commission's directives and therefore, he was cited for these violations. Since our meeting with the Nuclear Regulatory Commission on October 13, 1983, my client and I have thoroughly reviewed and understand the regulations and can assure you that there will be no further violations.

The following is being done to correct the existing violations so that his license can be restored:

(1) I have enclosed a copy of the storage area and a dead-bolt lock has been purchased and will be installed. The room is 13' by 20' and as you know, the machine has been sealed by the Government.

(2) My client has contracted the R. S. Landauer, Jr. and Company in Glenwood, Illinois and is presently ordering the necessary badges.

(3) He is now aware that leak test inspections must be done every six months and he is obtaining the names of approved inspectors so that he may comply with this rule.

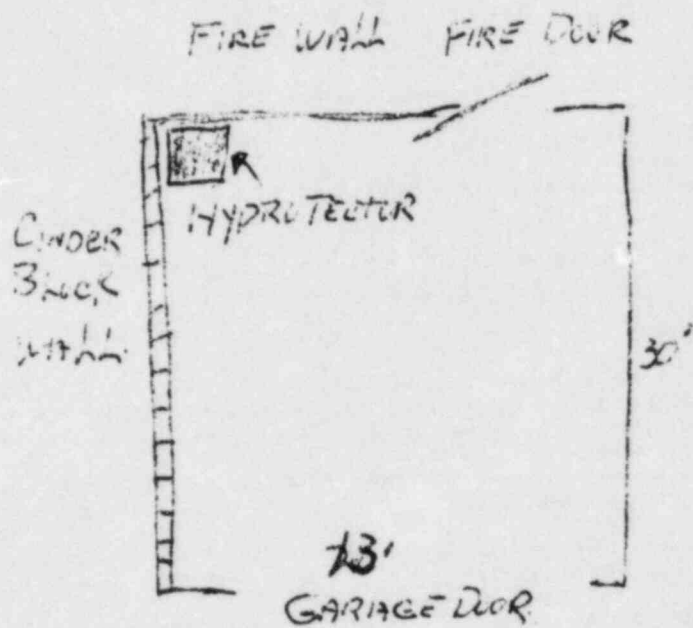
(4) He has obtained a list of authorized licensed users and is presently contacting them to locate one to operate the machine.

I have enclosed a copy of the diagram of the storage area and my client would appreciate if you would extend to him 5 months in order to correct all the existing violations. Thank you for your consideration in this matter!

Very truly yours,

Edward J. McGlinchey, Jr.
Edward J. McGlinchey, Jr., Esquire

cc: Robert Marks
Doctor John Glenn
Jay Gutierrez, Esquire



7/20/77



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

DEC 17 1983

License No. 37-21014-01
EA 83-112

Roof Auditing Services
ATTN: Robert B. Marks
President
P.O. Box 22
Oreland, PA 19075

Gentlemen:

Subject: Decision on Order to Show Cause

We have reviewed your responses to the Order to Show Cause and Order Temporarily Suspending License dated October 13, 1983. After careful consideration of your responses, the Director, Office of Inspection and Enforcement, has determined that adequate cause has been shown why your license should not be revoked and that suspension of your license can be rescinded subject to the conditions described in the enclosed Decision on Order to Show Cause. This decision is based upon the determination that you have made and plan to make improvements in your program to comply with license requirements. As discussed in the enclosure, however, additional improvements must be made and a license amendment must be obtained before licensed activities may be resumed.

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.

Sincerely,

A handwritten signature in dark ink, appearing to read "Richard C. DeYoung".

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Decision on Order to Show Cause

cc: Edward J. McGlinchey, Jr., Esq.

Commonwealth of Pennsylvania
Bureau of Radiological Health

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

ROOF AUDITING SERVICES
P.O. Box 22
Oreland, Pennsylvania 19075

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)
)
)

License No. 37-21014-01
EA 83-112

DECISION ON ORDER TO SHOW CAUSE

I

Roof Auditing Services, P.O. Box 22, Oreland, Pennsylvania 19075 (the "Licensee") is the holder of a specific byproduct material license issued by the Nuclear Regulatory Commission (the "Commission") pursuant to 10 CFR Part 30. The license, issued on June 4, 1982 and due to expire on June 30, 1987, authorizes the use, storage, and transfer of byproduct material as stated in the Licensee's application dated March 22, 1982 and letter supplementing that application dated May 27, 1982.

II

On October 13, 1983, the Director of the Office of Inspection and Enforcement issued an "Order to Show Cause and Order Temporarily Suspending License Effective Immediately", 48 FR 48885 (October 21, 1983), to the Licensee on the basis of a number of violations of NRC requirements enumerated in the Order. The violations included failure to store the material in a location prescribed by the license, failure to use film badges, and use of the material by persons other than the named user on the license. The Order required the Licensee to show cause why its license should not be revoked and also suspended the licensee's authority to use the material it holds under NRC license.

The Licensee has provided responses to the matters set forth in the Order in letters to the NRC staff dated November 15 and December 8, 1983. The letters describe in general terms the corrective actions that the Licensee proposes to take to correct the violations identified in the Order. Upon consideration of the Licensee's responses and proposed corrective action, the Director has determined the Licensee has shown adequate cause why the license should not be revoked.

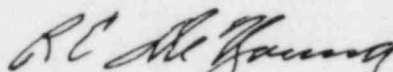
Further corrective action is necessary, however, before licensed activities may be resumed. This corrective action requires an amendment of the license. In this amendment, the Licensee must add an authorized user or users to its license to replace the currently named authorized user who no longer works for the company. Although the Licensee did attach a sketch of a proposed storage area to the December 8, 1983 letter, the Licensee must also request an amendment to the license to include a new storage area for the licensed material in lieu of the storage location currently identified in the license application. The application for an amendment must include a complete description of the method to control access to licensed material when in storage.

Until the Licensee applies for and is granted a license amendment to add an authorized user or users and an approved storage area to its license, it is prohibited from using radioactive material. The suspension of the license and terms of the October 13, 1983 Order, which required the Licensee to place all byproduct material in its possession in locked storage or to transfer such material to an authorized person, shall continue until an appropriate license amendment is issued.

III

Accordingly, the Licensee may not resume licensed activities until it has obtained a license amendment which identifies approved authorized users and which identifies a current approved location for storage of licensed material. Pending issuance of such an amendment, the suspension imposed by the Order of October 13, 1983, remains in effect and, accordingly, the Licensee shall maintain byproduct material in its possession in locked storage or transfer such material to an authorized recipient. If the Licensee does not apply for a license amendment within five months, the staff will reconsider the question of whether the license should be revoked and may issue an appropriate Order.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 27 day of December 1983



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

OCT 19 1983

License Nos. 13-09649-01
13-09649-02
EA 83-95

Terre Haute Regional Hospital
ATTN: William C. Giermak
Administrator
601 Hospital Lane
Terre Haute, IN 47802

Gentlemen:

This refers to the NRC safety inspection conducted on July 25 and 26, 1983 of activities authorized by NRC Licenses Nos. 13-09649-01 and 13-09649-02. During the inspection, twelve apparent violations of NRC requirements were identified. The results of the inspection were discussed on August 30, 1983 during an Enforcement Conference in the Region III office in Glen Ellyn, Illinois between Mr. Jerry Dooley and Dr. Nadeem Tannous of your staff and Mr. A. B. Davis and others of the NRC staff.

The apparent violations, five of which are similar to violations identified during a previous NRC inspection conducted on May 12, 1980, are described in the attached Notice of Violation and Proposed Imposition of Civil Penalties. Collectively they represent a significant breakdown in management oversight and control of your radiation safety program and demonstrate a clear need for improvement in the administration and control of the program to ensure adherence to NRC requirements and safe performance of licensed activities.

To emphasize the importance of these matters and the need to ensure implementation of effective management control of your licensed program, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the attached Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Two Thousand Five Hundred Dollars for the violations set forth in the Notice. The violations have been categorized in the aggregate as a Severity Level III problem in accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C.

The base civil penalty for a Severity Level III problem is \$2,000. However, as noted above, five of the apparent violations identified are similar to violations identified during a previous NRC inspection and for which corrective action was apparently not effective. Furthermore, in a number of areas of apparent non-compliance, there appear to be multiple examples of a particular violation. Consequently, the proposed civil penalty has been increased by 25 percent to \$2,500 because of 1) your failure to take effective corrective action for previously identified deficiencies, and 2) the multiple examples of several of the recently identified violations.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED


OCT 19 1983

You are required to respond to this letter and you should follow the instructions in the Notice when preparing your response. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

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 enclosure will be placed in the NRC's Public Document Room.

The responses directed by this letter and the accompanying 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 G. Keppler
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalties

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Terre Haute Regional Hospital
601 Hospital Lane
Terre Haute, IN 47802

License No. 13-09649-01
(Teletherapy)
License No. 13-09649-02
(Groups I-VI)
EA 83-95

An NRC inspection of activities authorized under NRC Licenses Nos. 13-09649-01 and 13-09649-02 was conducted on July 25 and 26, 1983. During the inspection, multiple instances of apparent failures to comply with NRC requirements were identified. Collectively, these failures represent a significant breakdown in the management of the licensee's radiation safety program. To emphasize the importance of these matters and the need to ensure implementation of effective management control of your licensed program, the NRC proposes to impose civil penalties in the cumulative amount of Two Thousand Five Hundred Dollars. The base civil penalty of Two Thousand Dollars has been increased 25% for two reasons. First, five of the instances, specifically 1) use of byproduct materials by unauthorized individuals, 2) failure to leak test sealed sources at required intervals, 3) failure to provide personnel monitoring devices, 4) failure to calibrate survey meters at required intervals, and 5) failure to post certain documents or notices, were identified during a previous NRC inspection on May 12, 1980. This indicates a failure on your part to take effective corrective action with regard to previously identified violations. The enforcement policy permits increasing a civil penalty for this reason. A civil penalty may also be increased for multiple examples of a particular violation. Multiple examples are set forth in the Notice. In accordance with the General Policy and Procedure for NRC Enforcement Actions (10 CFR Part 2, Appendix C), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL96-295, and 10 CFR 2.205, these particular violations and the associated civil penalties are set forth below:

- A. Item 9.E of Amendment No. 10 to License No. 13-09649-02 authorizes only storage of sealed radioactive sources for Group VI uses.

Contrary to the above, sealed radioactive sources for Group VI uses were used by the licensee on multiple occasions without authorization. Specifically, sources were used to treat patients on 14 occasions in 1981, 40 occasions in 1982 and 21 occasions in 1983.

- B. Condition No. 14 of License No. 13-09649-02 requires that licensed material be used in accordance with the provisions of 10 CFR 35.14(b). 10 CFR 35.14(b)(3) requires for Group VI that no licensee shall receive, possess or use byproduct material except as contained in a source or device that has been manufactured, labeled, packaged, and distributed in accordance with the provisions there specified.

OCT 19 1983

Contrary to the above, the licensee received three Amersham Corporation (Model Nos. CDCQ6914, 6915 and 6916) sealed sources containing byproduct material on March 16, 1983, and used them for Group VI uses on three occasions during 1983. However, these sources were not manufactured, labeled, packaged, and distributed as specified in 10 CFR 35.14(b)(3).

- C. Condition No. 17 of License No. 13-09649-02 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in the License Application received July 5, 1978 and certain referenced letters.

Item 7, "Medical Isotope Committee," Paragraph 3 of the License Application states, "The duties of the committee which pertains to the function of Medical Isotope Utilization include those duties listed in Appendix B of the Guide for Preparation of Applications for Medical Programs printed November 1, 1977, by the Nuclear Regulatory Commission."

Duty 9 of the above referenced guide indicates that the Medical Isotope Committee shall "ensure the byproduct material license is amended, when necessary, and prior to any changes in facilities, equipment, policies, procedures and personnel."

Contrary to the above, as of July 26, 1983, the Medical Isotope Committee, had not requested that License No. 13-09049-02 be amended to authorize the use of sealed sources for Group VI medical therapeutic procedures, although the licensee initiated such use in 1981. In addition, the Committee did not request until June 20, 1983, that the license be amended to add a qualified physician(s) who was authorized to use therapy sources for Group VI uses, although unauthorized physicians used such sources prior to that date.

- D. Condition No. 12 of License No. 13-09649-02 requires that licensed material be used only by, or under the supervision of, individuals specifically named in the license.

Contrary to the above, licensed material was used for Groups II, III, IV, V and VI uses by individuals, or under the supervision of individuals, not specifically named in the license.

- E. 10 CFR 35.14(b)(5)(i) requires, for Group VI uses, that any licensee who possesses and uses sources or devices containing byproduct material shall cause each source or device containing more than 100 microcuries of byproduct material with a half-life greater than thirty days, to be tested for contamination and/or leakage at intervals not to exceed six months.

Contrary to the above, 11 cesium-137 brachytherapy sources, Model No. CDCJ, were not tested for contamination and/or leakage at the required intervals. Specifically, these sources had not been tested between December 31, 1981 and July 26, 1983.

- F. 10 CFR 35.14(b)(5)(v) requires licensees who possess and use sources or devices containing byproduct material for Group VI uses to conduct a quarterly physical inventory to account for all sources and devices received and possessed.

Contrary to the above, the required quarterly physical inventory to account for all Group VI sources received and possessed has not been performed since May 12, 1980.

- G. Condition No. 17 of License No. 13-09649-02 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in the License Application received July 5, 1978 and certain referenced letters.

1. Item 20(3) of the License Application states that "Surveys of the patient's room and surrounding areas will be conducted as soon as practicable after the sources are implanted."

Contrary to the above, brachytherapy cesium-137 sources were implanted on June 8 and 14, July 6, 1983, and on numerous other occasions without the required surveys being performed.

2. Item 20(4) of the License Application requires the use of a form containing specific instructions for the nursing staff caring for patients undergoing brachytherapy.

Contrary to the above, the form used on the patients' chart did not contain all of the required instructions as specified in Item 20(4), e.g., nurses are to, "wear film badges," patients are to have, "a dismissal survey...before patient is discharged," etc.

3. Item 20(6) of the License Application states that "When a nurse receives an assignment to a therapy patient, a film or TLD badge should be obtained immediately from the Nuclear Medicine Department. The badge shall be worn only by the nurse to whom it is issued and shall not be exchanged between nurses."

Contrary to the above, nurses assigned to brachytherapy patients have not been issued film or TLD badges since the date the brachytherapy program began in 1981.

- H. Condition No. 17 of License No. 13-09649-02 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in the License Application received July 5, 1978.

Item 21(17) of the License Application states that the xenon trap will be monitored at the end of each week to ensure trap efficiency and Item 21(18d) states all exhaust vents in the xenon use and storage areas will be checked twice a year to confirm their continued efficiency.

OCT 19 1983

Contrary to the above, the xenon trap has not been monitored since February 1983 and the exhaust vents were not checked for efficiency in the past 2 years.

- I. Condition No. 17 of License No. 13-09649-02 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in the License Application received July 5, 1978 and certain referenced letters, including a letter dated August 14, 1978 which states in reference to Item 10 of the License Application that survey meters will be calibrated annually.

Contrary to the above, a Keithley survey meter (Cutie Pie) Model No. 36100, was not calibrated by the licensee between November 30, 1981 and July 26, 1983.

- J. Condition No. 14(A) of License No. 13-09649-01 requires teletherapy sources to be tested for leakage at intervals not to exceed six months.

Contrary to the above, a leak test of the licensee's teletherapy source was last performed in 1980.

- K. 10 CFR 19.11(a) and (b) requires posting of current copies of Part 19, Part 20, the license, license conditions, documents incorporated into the license, license amendments, and operating procedures or a notice describing where these documents may be examined. 10 CFR 19.11(c) requires that these documents or notices appear in a sufficient number of places to permit individuals engaged in licensed activities to observe them on the way to or from a licensed activity to which the document applies.

Contrary to the above, on July 26, 1983, the above required documents or notices were not posted by the licensee in the Radiation Oncology Department.

- L. 10 CFR 35.27(b) requires that records of monthly spot-check measurements of teletherapy units required by 10 CFR 35.22, shall be preserved for two years after completion of the spot-check measurements.

Contrary to the above, the licensee did not maintain records of monthly spot checks of its teletherapy unit that were made from July 1981 through June 1982.

Collectively, the above twelve violations have been evaluated as a Severity Level III problem (Supplements IV and VI).

(Cumulative Civil Penalties - \$2,500 assessed equally among the violations.)

Pursuant to the provisions of 10 CFR 2.201, Terre Haute Regional Hospital is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, DC 20555, with a copy to this office, within 30 days of


OCT 19 1983

the date of this Notice, a written statement or explanation in reply, including 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 will be 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. 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, Terre Haute Regional Hospital may pay the civil penalties in the amount of Two Thousand Five Hundred Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should Terre Haute Regional Hospital fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties in the amount proposed above. Should Terre Haute Regional Hospital elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer 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, in whole or in part, such answer may request remission or mitigation of the penalty. In requesting mitigation of the proposed penalties, the five factors contained in Section IV.B of 10 CFR Part 2, Appendix C 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 by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of Terre Haute Regional Hospital 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 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 penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION


James G. Keppler
Regional Administrator

Dated at Gler Ellyn, Illinois
this 18 day of October 1983

Terre Haute Regional Hospital

601 Hospital Lane
Terre Haute, Indiana 47802
(812) 232-0021

November 7, 1983

James G. Keppler
Regional Administrator
U.S.N.R.C.
Region III
799 Roosevelt Road
Glen Ellyn, Ill. 60137

Dear Mr. Keppler:

We have attached our response to the Notice of Violation that was issued as a result of the NRC Safety Inspection conducted at Terre Haute Regional Hospital on July 25 and 26, 1983.

It is our opinion the decision to impose a civil penalty of \$2500.00 against Terre Haute Regional Hospital is unfair.

In the Notice of Violation it is noted that the fine is being imposed to emphasize the importance of the matters and the need to ensure implementation of effective management control of the program. We wish to point out two distinct differences between the 1980 and 1983 safety inspections. First, in the 1980 inspection, there were eleven (11) violations; eight (8) dealing with the Nuclear Medicine program and three (3) dealing with the Teletherapy program. Only one of these violations in the Teletherapy Department dealt with using brachytherapy in the treatment of cancer patients. Of the violations noted in the 1983 inspection only one of the twelve was specific to Nuclear Medicine and the others involved the brachytherapy program. Thus, the problems in 1983 were not the same as they were in 1980. The Nuclear Medicine department has corrected their deficiencies that were noted in 1980.

NOV 9 1983

HCA Hospital Corporation
of America

James G. Keppler
U.S.N.R.C.
Page Two.

Secondly, the 1983 inspection was the first inspection for the Radiation Oncology Department that was formed in February 1981. The violations that were noted were certainly not intentional, but rather the result of confusion over amendments on the license and the oversight of some items on the license. We were developing a new department and unfortunately some items were overlooked.

The fact that we have amended license #02 seventeen times and license #01 eleven times indicates that we have certainly tried to comply with the conditions of the license and the requirements of NRC. The fact that the violations cited in 1980 dealt basically with the Nuclear Medicine program and the violations in 1983 deal basically with the Radiation Oncology program seems to point out that we are being cited for repeat violations; when, in fact, the reports deal with two separate programs.

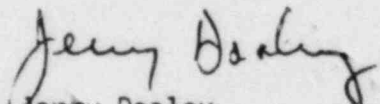
All violations or apparent violations noted in the 1983 inspection report have been corrected and we have instituted management controls through the Nuclear Medicine Department, the Radiation Oncology Department, and the Radiation Therapy Committee to ensure that the conditions of the license and the regulations of NRC are complied with.

We appreciate the help the staff of NRC has given us during the past few months. They have been most helpful in resolving some of the confusion.

Based on our response, we are hereby requesting that NRC waive the civil penalty against Terre Haute Regional Hospital.

We appreciate your consideration. If you or your staff have any questions, please feel free to contact me.

Sincerely,


Jerry Dooley
Associate Administrator

JD:ns

Enclosure: 1

RESPONSE TO NOTICE OF VIOLATION

License No.: 13-09649-01

License No.: 13-09649-02

- A. Item 9E of Amendment #10 to License #13-09649-02 authorizes only storage of Group VI Sources.

Response:

Group VI byproduct material was authorized for our hospital December 17, 1976, amendment #5 to license #13-09649-02. Amendment #9 on June 26, 1978 authorized use of "any procedure listed in Group VI" through July 31, 1983. Amendment #10, page 3 of 3, item #6 states, "the licensee may possess and use for the procedures listed in sub item 9E, cesium-137 sealed sources (Searle-Amersham, Model Nos. CDC J2; CDC.J3, CDC.J4 and CDC.J5) that were in his possession on August 30, 1977. This appears to us to be somewhat confusing. In view of this confusion, it does not appear appropriate to clarify this as a violation. Our license has been amended, amendment #17, and it is our opinion this confusion is resolved.

- B. Use of Amersham point sources

Response:

This was an honest error made with the intention of providing the best possible radiation therapy treatment to our patients. Our Radiation Oncologists and Radiation Physicist made the assumption that a reputable company, Amersham, would provide us with approved sources. This error was due to a misunderstanding on our part and was certainly not a calculated disregard of the NRC regulations. It is our opinion that Amersham should assume part of the responsibility of this honest error. In a letter dated August 26, 1983, we advised you that the three Amersham Cesium 137 brachytherapy sources (CDCQ 6914, 6915 and 6916) are no longer being used at Terre Haute Regional Hospital. It is our opinion this violation has been corrected.

- C. Radiation Safety Committee and amendments to license #02 for use of Group VI sources

Response:

In view of the confusion that surrounds item A, the Radiation Safety Committee did not request an amendment to use Group VI because the hospital was not aware they were in violation. This confusion, however, has been clarified with amendment #17.

License #02 was amended on September 4, 1980, amendment #13, and January 14, 1982, amendment #15, to permit Dr. Benny Ko to use or supervise use of material.

It was an oversight that the Radiation Oncologist did not get his name on the #02 license for Cesium at the same time (January 1981), that his name was added to the #01 license for Cobalt. It was obviously not a malicious violation as we corrected the oversight ourselves, before the NRC inspection in July 1983. The corrected amendment was delayed somewhat because of our wanting to add a new radiation oncologist, who started in August 1983.

It is our opinion this item has been corrected with our amendment to the license.

- D. Licensed material in Group II, III, IV, V, and VI used by individuals not supervised as named in license

Response:

Amendment #13 and amendment #15 authorizes Dr. Ko to use or supervise the use of material. Dr. Ko has supervised the rare uses of Group IV and V, anti-cancer treatments by the Radiation Oncologists. In a letter dated August 22, 1983, Dr. Ko attested to his supervision of Dr. Robison's usage of I-131 in the treatment of five thyroid cancer patients and the use of P-32 for the treatment of two cases of lung cancer. In view of Dr. Ko's letter, it is our opinion we were not in violation of our license or NRC regulations.

We have proposed a new amendment, mailed October 21, 1983, that will clarify this matter. This amendment will authorize Dr. Robison and Dr. Unal to use I-131 and P-32.

- E. Testing for contamination and leakage at required intervals

Response:

This violation has been corrected at this time. Leak tests and tests for contamination are now being done in accordance with our license conditions and with NRC regulations. A record of these tests are being maintained and will be reviewed at the regular meetings of the Radiation Oncology Department and the meeting of the Radiation Safety Committee.

- F. Quarterly inventory of Group VI Sources

Response:

Our inventory involved only the sources being used and this was done after each procedure when the sources were returned to the safe. Quarterly inventory of all sources has now been implemented and records of

these inventories will be kept and reviewed by the Radiation Oncology Department and the Radiation Safety Committee. We have corrected this violation.

- G. Survey of Patient's room, use of forms containing specific information, and monitoring nursing personnel.

Response:

All items of violation have been corrected. Patient rooms and surroundings will be surveyed on all patients receiving brachytherapy cesium 137 implants as soon as practical after the sources are implemented. Records will be kept and reviewed by the Radiation Oncology Department and the Radiation Safety Committee.

The form which provides specific instructions for nursing staff caring for patients undergoing brachytherapy is being revised. This has been discussed with the Radiation Oncology Department and the Director of Nursing Service. The form will comply with the requirements of Appendix L of Guide 10.8. This violation will be corrected by November 10, 1983.

Monitoring devices were purchased prior to the inspection and are now being utilized by nursing personnel caring for patients receiving brachytherapy implants. Records will be kept and reviewed by the Radiation Oncology Department and the Radiation Safety Committee. Results will be given to nursing service personnel, if requested. We wish to point out that in our previous inspection (1980) the violation cited was for not monitoring an employee working in radiopharmaceuticals and not nursing service personnel. This violation has been corrected.

- H. Check of Xenon traps and exhaust vents

Response:

We have corrected this violation. The Xenon trap is checked at the end of each week and a record kept. Exhaust vents will be checked twice a year and records will be kept. These records will be checked by the Nuclear Medicine Department, Health Physics, Inc., and the Radiation Safety Committee.

- I. Calibration of Keithly Survey meter

Response:

This violation has been corrected. The survey meter has been sent for calibration. We wish to point out that we have two survey meters, a

geiger counter in Nuclear Medicine and the one in Radiation Oncology. At no time were we without a survey meter that had not been calibrated annually.

J. Leakage test of Teletherapy Source

Response:

This violation has been corrected. The leakage test of the teletherapy source will be done in accordance with our license conditions and in accordance with NRC regulations. Appropriate records will be kept and reviewed by the Radiation Oncology Department and the Radiation Safety Committee.

K. Posting of Part 19 and Part 20, license, license amendments, etc.

Response:

This violation has been corrected. Appropriate notices are posted in the Radiation Oncology Department and the Nuclear Medicine Department.

L. Monthly Spot Check Measurements

Response:

Monthly spot check records have been maintained since July 1982 and records are in the Radiation Oncology Department. The period from July 1981 - July 1982 was a time when the new department was just getting opened and equipment was being ordered.

This violation is corrected now and has been since July 1982.

In addition to our above responses, we wish to reaffirm our commitment to the ALARA program dated August 13, 1980. Administration at Terre Haute Regional Hospital recognizes their responsibility in management and control of the Radiation Oncology and Nuclear Medicine Safety Program. We are committed to fulfilling our responsibility and have taken measures to work closer with the Radiation Safety Committee and the Radiation Safety Officer, the Nuclear Medicine Department, and the Radiation Oncology Department to see that conditions of our license and regulations of NRC are followed.



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

January 17, 1984

License Nos. 13-09649-01
13-09649-02
EA 83-95

Terre Haute Regional Hospital
ATTN: William C. Giermack
Administrator
601 Hospital Lane
Terre Haute, IN 47802

Gentlemen:

This acknowledges receipt of your letter dated November 7, 1983, in response to the Notice of Violation and Proposed Imposition of Civil Penalties sent to you with our letter dated October 19, 1983. The Notice of Violation sets out violations found during a routine NRC safety inspection conducted at Terre Haute Regional Hospital on July 25 and 26, 1983. The civil penalties were proposed because of the significant breakdown in management oversight and control of your radiation safety program as evidenced by the number of violations identified.

After careful consideration of your response, and for the reasons given in the Appendix attached to the enclosed Order, we have concluded that, with one modification, the violations did occur as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties. We have given careful consideration to your request for remission of the proposed penalties and have concluded that no adequate reasons have been stated as to why the penalties should be remitted or mitigated. Accordingly, we hereby serve on Terre Haute Regional Hospital the enclosed Order Imposing Civil Monetary Penalties in the amount of Two Thousand Five Hundred Dollars.

We will review the effectiveness of your corrective actions during subsequent inspections.

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,

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Order Imposing Civil Monetary Penalties

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

Terre Haute Regional Hospital
601 Hospital Lane
Terre Haute, IN 47802

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)

License Nos. 13-09649-01
13-09649-02

EA 83-95

ORDER IMPOSING CIVIL MONETARY PENALTIES

I

Terre Haute Regional Hospital (the "licensee") is the holder of Byproduct Material Licenses No. 13-09649-01 and No. 13-09649-02 (the "licenses") issued by the Nuclear Regulatory Commission (the "Commission") which authorizes medical diagnostic and therapeutic treatment. License No. 13-09649-01 was issued on January 15, 1979 and expires on January 31, 1984. License No. 13-09649-02 was issued on October 18, 1978 and expires on March 31, 1984.

II

As a result of a routine inspection conducted on July 25 and 26, 1983 by the Nuclear Regulatory Commission's Region III Office, 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 on the licensee by letter dated October 19, 1983. The Notice stated the nature of the violations, the provisions of the the Commission's requirements that the licensee had violated, and the cumulative amount of the proposed civil penalties. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalties with a letter dated November 7, 1983.

III

Upon consideration of the licensee's response and the statements of fact, explanation, and arguments for remission or mitigation of the proposed civil penalties contained therein, as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined that the penalties proposed for the violations set out 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 (42 U.S.C. 2282, PL 96-295), and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay civil penalties in the cumulative amount of Two Thousand Five Hundred Dollars 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 of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

V

The licensee may, within 30 days of the date of this Order, request a hearing. A request for a hearing shall be addressed to the Director, Office of


Inspection and Enforcement. A copy of the hearing request shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555. If a hearing is requested, the Commission will issue an Order designating the time and place of hearing. Should the licensee fail to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings and, if payment has not been made by that time, the matter may be referred to the Attorney General for collection.

VI

In the event the licensee requests a hearing as provided above, the issues to be considered at such a 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 as modified by the Appendix to this Order, and
- (b) Whether on the basis of such violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 17 day of January 1984

Appendix

EVALUATION AND CONCLUSIONS

The violations and associated civil penalties are identified in the Notice of Violation and Proposed Imposition of Civil Penalties dated October 19, 1983. The Office of Inspection and Enforcement's evaluations and conclusions regarding the licensee's response dated November 7, 1983 are presented herein.

In its response, the licensee admits that, with the exception of Item D, each violation occurred as described in the Notice of Violation. Additionally, the licensee offered several reasons why the civil penalties should not be imposed. For Item D, the original violation and licensee response are stated and the NRC's evaluations and conclusions regarding the licensee's response are presented. With respect to the licensee's request that the civil penalties not be imposed, the licensee's reasons are given and NRC's evaluations regarding the licensee's reasons are presented. A final conclusion regarding the civil penalties is also presented.

Item D

Statement of Violation

Condition No. 12 of License No. 13-09649-02 requires that licensed material be used only by, or under the supervision of, individuals specifically named in the license.

Contrary to the above, licensed material was used for Groups II, III, IV, V, and VI uses by individuals, or under the supervision of individuals, not specifically named in the license.

Licensee's Response

The licensee stated that amendment No. 13 and amendment No. 15 of the license authorize Dr. Ko to use or supervise the use of material. The licensee further stated that Dr. Ko has supervised the rare uses of Group IV and V anti-cancer treatments by the Radiation Oncologists. Dr. Ko supervised Dr. Robison's use of iodine-131 in the treatment of five thyroid cancer patients and the use of phosphorus-32 in the treatment of two cases of lung cancer. In view of Dr. Ko's supervising activities, the licensee submits it was not in violation of its license or NRC regulations.

NRC's Evaluation

Based on information provided by the licensee, the NRC is deleting the reference to Groups IV and V in this violation. However, the NRC maintains that the licensee has provided no information to show that Groups II, III, and VI uses were conducted by or under the supervision of authorized individuals. Therefore, Item D, as modified, remains a violation with a civil penalty for the violation as originally proposed.

Licensee's Reasons for Not Imposing the Civil Penalties

The licensee offered essentially two reasons why the civil penalties should not be imposed in this matter. These reasons are presented below along with the NRC's evaluation.

1. Licensee's Reason

The licensee states that the violations cited in the 1980 inspection dealt primarily with the nuclear medicine program, while most of the violations cited in the 1983 inspection involved the brachytherapy program. The licensee further states that the problems in the nuclear medicine program were corrected and, since the brachytherapy program is a separate program, the violations in that program should not have been considered as indicative of a failure to take effective corrective action for prior similar problems.

NRC's Evaluation

Organizations may be established in any way a licensee wishes for administrative control; however, the NRC considers all program activities authorized under a single license (13-09649-02) to be an integrated whole. In the 1983 inspection, five of the violations were similar to violations identified in a 1980 inspection. Specifically, these violations included: 1) use of byproduct materials by unauthorized individuals, 2) failure to leak test sealed sources at required intervals, 3) failure to provide personnel monitoring devices, 4) failure to calibrate survey meters at required intervals, and 5) failure to post certain documents or notices. Even though these violations in the 1983 inspection occurred in a different program than in the 1980 inspection (the brachytherapy program versus the nuclear medicine program), the violations indicate a failure to take effective corrective action with regard to previously identified violations since the licensee is responsible for ensuring corrective action is taken throughout its organization regardless of its structure.

2. Licensee's Reason

The licensee suggests that a civil penalty is not appropriate since several violations resulted from confusion over amendments in the license and the oversight of items in the license.

NRC's Evaluation

Any confusion resulting from amendments to the license and the oversight of items in the license was of the licensee's own doing. The licensee is responsible for ensuring that the requirements of its license are understood and carried out. The NRC expects meticulous attention to detail in the conduct of licensed activities. Under the NRC's Enforcement Policy, licensees who cannot achieve and maintain adequate levels of compliance will not be permitted to continue licensed activities.

Conclusion

After reviewing the licensee's reasons why the civil penalties should not be imposed, the staff has determined that the licensee has not provided a basis for reduction of the civil penalties.

NOVEMBER 3, 1983

Docket: 040-00299
License: SUA-648
EA No. 83-108

Union Carbide Corporation
Metals Division
ATTN: E. W. Shortridge
Uranium Production Manager
P.O. Box 1029
Grand Junction, Colorado 81502

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

This refers to the routine, unannounced NRC safety inspection conducted by Messrs. C. L. Cain, R. T. Woolsey, and R. C. Brown of this office on August 23-25, 1983, of activities authorized by NRC Source Material License SUA-648. During the inspection, eight apparent violations of NRC requirements were identified. The results of the inspection were discussed on September 21, 1983 during an Enforcement Conference at the NRC Uranium Recovery Field Office in Denver, Colorado, between Mr. E. W. Shortridge and other members of your staff and Mr. John T. Collins, Regional Administrator of the NRC Region IV Office, and other members of his staff.

The eight apparent violations are described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties. Collectively they represent a breakdown in management oversight and control of the radiation safety program and demonstrate the need for improvement in the administration and control of the program to assure adherence to NRC requirements and safe performance of licensed activities.

To emphasize the importance of adequate control of the radiation safety program, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Four Thousand Dollars for the violations set forth in the enclosed Notice. The eight violations have been categorized in the aggregate as a Severity Level III problem in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C, 47 FR 9987 (March 9, 1982)).

You are required to respond to the enclosed Notice and in preparing your response you should follow the instructions specified in the Notice. In addition, your reply should describe, in particular, those actions taken or planned to improve the effectiveness of your management control of the requirements of your license. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is warranted.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Union Carbide Corporation

-2-

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 enclosure 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.

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

Sincerely,



John T. Collins
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalties

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Union Carbide Corporation
Metals Division
P.O. Box 1029
Grand Junction, Colorado 81502

Docket: 040-00299
License: SUA-648
EA No. 83-108

An NRC inspection of activities authorized under NRC License No. SUA-648 was conducted August 23-25, 1983. During the inspection, multiple examples of apparent failure to comply with NRC requirements were identified. Collectively, these failures represent a breakdown in the management of the radiation safety program.

To emphasize the importance of adequate control of the radiation safety program, the Nuclear Regulatory Commission proposes the imposition of cumulative civil penalties in the amount of Four Thousand Dollars (\$4,000) for this matter. In accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C) 47 FR 9987 (March 9, 1982), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, these particular violations and the associated civil penalties are set forth below:

1. License Condition 22 requires either hourly checks to verify operation of the yellowcake dryer scrubber or use of an audible alarm to signal system failure. Use of an audible alarm requires that its function be checked daily.

Contrary to this requirement, though the licensee had chosen the option of using an audible alarm, its function had not been checked on a daily basis since August 1982.

2. License Condition 25 requires, in part, that all radiation monitoring sampling and detection equipment shall be recalibrated after each repair and as recommended by the manufacturer or at least semiannually, whichever is more frequent.

Contrary to this requirement:

- a. Instrumentation used to analyze radon daughter samples had not been properly calibrated since August 1982.
 - b. Instrumentation used to perform gamma exposure rate measurements at the mill had not been calibrated from March 1982 to February 1983.
3. License Condition 30 requires, in part, that written procedures shall be established for nonoperational activities to include in-plant and environmental monitoring, bioassay analyses, and instrument calibrations.

All written procedures shall be reviewed and approved in writing by the radiation safety officer before implementation and whenever a change in procedure is proposed.

Contrary to these requirements:

- a. Procedures had not been established for the following activities:
 - (1) Determination of exposure of mill workers to airborne radionuclides.
 - (2) Conversion of fixed alpha contamination survey data to units of measurement specified in License Annex A.
 - (3) Administrative control and frequency specification for instrument calibration.
 - (4) Laboratory fluorometry operations including calibration, standard preparation, and sample dilution.
 - b. Written procedures had not been approved in writing by the radiation safety officer.
4. License Condition 31 requires, in part, that administrative offices shall be surveyed monthly for surface contamination and that survey results shall be compared with limits specified in License Annex A. License Annex A specifies limits for both fixed and removable contamination.
- Contrary to this requirement, surveys for fixed contamination had not been performed in administrative offices since August 1982.
5. License Condition 42(i) issued June 30, 1982, requires, in part, that the licensee shall submit by May 1, 1983, for review and approval in the form of a license amendment, a detailed plan for (1) a lined evaporation pond for use in seepage and surface water collection, or (2) the collection and rerouting of such water and seepage to the mill circuit.
- Contrary to this requirement, a plan had not been submitted at the time of the inspection on August 23, 1983.
6. License Condition 53(d) requires that slurry transport lines and lines from the A-9 pit shall be examined monthly using an ultrasonic device at locations where a rupture of the pipe could be expected to affect the stability of an embankment.
- Contrary to this requirement, monthly examinations were performed only once since February 1983.

7. License Condition 56 requires, in part, that the licensee shall implement the environmental monitoring program summarized in Table 6.9 of the Final Environmental Statement Related to the Operation of Gas Hills Uranium Projects (NUREG-0702) and shall provide at least semiannual documented management audits to determine the adequacy of program implementation.

Contrary to this requirement:

- a. Although Table 6.9 stipulates that the yellowcake effluent stack shall be sampled quarterly, this stack was sampled only twice during 1982.
 - b. Only one semiannual audit had been performed since August 1982.
8. License Condition 38 requires, in part, that results of semiannual fire drills, including remedial actions, shall be documented.

Contrary to this requirement, results of drills conducted during August 1982 and March 1983 were not documented.

Collectively, the above eight violations have been evaluated as a Severity Level III problem (Supplements IV and VI).

(Cumulative Civil Penalties - \$4,000 assessed equally among the violations.)

Pursuant to the provisions of 10 CFR 2.201, Union Carbide Corporation is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, DC 20555, with a copy to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including 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 will be 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. 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, Union Carbide Corporation may pay the civil penalties in the amount of Four Thousand Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should Union Carbide Corporation fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties in the amount proposed above. Should Union Carbide Corporation elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer may: (1) deny the violations listed in the 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 penalties in whole or in part, such answer may request remission or mitigation of the penalties. In requesting mitigation of the proposed penalties, the five factors contained in

section IV.B of 10 CFR Part 2, Appendix C, 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 by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of Union Carbide Corporation is directed to the other provisions of 10 CFR 2.205 regarding the procedure for imposing a civil penalty.

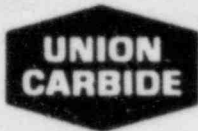
Upon failure to pay any civil penalty due which has been subsequently determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to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

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

John T. Collins
Regional Administrator

Dated at Arlington, Texas
this 3rd day of November 1983



UNION CARBIDE CORPORATION OLD RIDGEBURY ROAD, DANBURY, CT 06817

BY CERTIFIED MAIL

December 9, 1983

To: Director, Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

cc: Mr. John T. Collins, Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, TX 76011

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL
PENALTIES

Docket: 040-00299

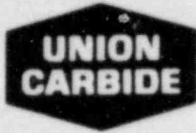
License: SUA - 648

EA No. 83-108

Attached to this letter, as required by the provisions of 10 CFR 2.201, you will find a copy of Union Carbide Corporation's ("UCC") statement and explanation in response to the subject Notice of Violation issued by John Collins, Regional Administrator, Region IV, U.S. Nuclear Regulatory Commission ("NRC") on November 3, 1983. Also attached, and in accordance with the provisions of 10 CFR 2.205, is a copy of Union Carbide Corporation's answer protesting the imposition of the proposed civil penalty and requesting remission, or, at a minimum, mitigation of the penalty.

Very truly yours,


E. W. Shortridge



UNION CARBIDE CORPORATION OLD RIDGEBURY ROAD, DANBURY, CT 06817

December 9, 1983

To: Director, Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

cc: Mr. John T. Collins, Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, TX 76011

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL
PENALTIES

Docket: 040-00299

License: SUA - 648

EA No. 83-108

The following comprises Union Carbide Corporation's (UCC) response, in accordance with the provisions of 10 CFR 2.201 and 2.205, to the subject Notice of Violation, dated November 3, 1983, issued as a result of an NRC inspection of our Gas Hills, Wyoming facility conducted on August 23-25, 1983. The first section of this response contains our written statement of explanation in reply to each of the alleged violations. The second section is our response to the proposed civil penalty. The third part responds to the request that we describe actions taken, or to be taken, to improve the effectiveness of our management control of license requirements.

PART ONE

I. ALLEGED VIOLATION 1.

A. "License Condition 22 requires either hourly checks to verify operation of the yellowcake dryer scrubber or use of an audible alarm to signal system failure. Use of an audible alarm requires that its function be checked daily. Contrary to this requirement, though the licensee had chosen the option of using an audible alarm, its function had not been checked on a daily basis since August, 1982."

B. Response

(1) Admission or denial. The violation occurred.

(2) Explanation. The operation of the scrubber was being checked every two hours during yellowcake drying operations and the checks were documented. The audible alarm has always been in operating condition and was in that condition on the day of inspection. It has been inspected periodically. Undetected, prolonged malfunctions under these circumstances would be extremely unlikely.

(3) Corrective steps. The Radiation Control and Safety Offices (RCSO) has held a training meeting with the mill supervisors and operators to ensure compliance with the written procedure covering License Condition 22. This meeting has been documented.

(4) Avoidance of further violation. A report sheet to document either the hourly inspection of the scrubbers or the daily check of the audible alarm is in place. This report sheet is monitored and inspected during every weekly Radiation Inspection carried out by the RCSO or the Radiation Technician. These weekly inspections are documented.

(5) Full compliance date. Procedures to ensure compliance are now in place. It should be noted, however, that yellowcake drying operations were closed down indefinitely in June, 1983 and license condition 22 is only applicable during such operations.

II. ALLEGED VIOLATION 2.

A. "License Condition 25 requires, in part, that all radiation monitoring sampling and detection equipment shall be recalibrated after each repair and as recommended by the manufacturer or at least semiannually, whichever is more frequent.

Contrary to this requirement:

a. Instrumentation used to analyze radon daughter samples had not been properly calibrated since August 1982.

b. Instrumentation used to perform gamma exposure rate measurements at the mill had not been calibrated from March 1982 to February 1983."

B. RESPONSE

a.

(1) Admission or denial. UCC denies this violation.

(2) Explanation. At the time of the NRC inspection, UCC procedures required that its radon daughter instrumentation be sent

to MSHA for calibration. MSHA calibration procedures require the use of a high level radiation source, and the instrumentation is then checked against a low level source owned by UCC. UCC considers this to be a proper calibration, and there was a calibration sticker dated April 25, 1983 on the instrumentation. UCC had no documentation other than the calibration sticker since MSHA keeps these records.

(3) Corrective steps. Without admitting that a violation has occurred, since the NRC inspector did not agree that the MSHA procedure constitutes proper calibration as required by License Condition 25, UCC changed its procedure in September, 1983 to include calibration of the instrumentation against a low level alpha source in addition to the calibration as required by MSHA.

(4) Avoidance of further violation. Without admitting that a violation has occurred, the revised calibrating procedure is being carried out by the RCSO or his qualified designee, is documented, and is subject to internal audits (as was the former procedure).

(5) Full compliance date. Inapplicable.

b.

(1) Admission or denial. The violation occurred. The calibration that should have been performed in September, 1982 was not done.

(2) Explanation. The gamma scintillator that was due for calibration was sent to UCC's Grand Junction laboratory for calibration in September, 1982. A delay, however, occurred in completing the calibration and a spare instrument at Gas Hills was used for required gamma surveys. That instrument, although not calibrated within the preceding six months, was checked operationally with a radiation source before each use.

(3) Corrective steps. The gamma scintillator whose calibration had been delayed was calibrated in March, 1983 and returned to Gas Hills. It was in use at the time of inspection.

(4) Avoidance of further violation. After March, 1983, procedures which had been established to calibrate gamma scintillators semi-annually were modified to ensure timely calibration. UCC's Grand Junction laboratory was notified regarding the necessity for timely instrument calibration, and responded by assigning this responsibility to one person.

(5) Full compliance date. Compliance with License Condition 25 has been effective since March 7, 1983, before the date of the NRC inspection.

III. ALLEGED VIOLATION 3.

A. "License Condition 30 requires, in part, that written procedures shall be established for nonoperational activities to

include in-plant and environmental monitoring, bioassay analyses, and instrument calibrations.

All written procedures shall be reviewed and approved in writing by the radiation safety officer before implementation and whenever a change in procedure is proposed.

Contrary to these requirements:

a. Procedures had not been established for the following activities:

1. Determination of exposure of mill workers to airborne radionuclides.
2. Conversion of fixed alpha contamination survey data to units of measurement specified in License Annex A.
3. Administrative control and frequency specification for instrument calibration.
4. Laboratory fluorometry operations including calibration, standard preparation, and sample dilution.

b. Written procedures had not been approved in writing by the radiation safety officer."

B. RESPONSE

a.

(1) Admission or denial. UCC denies that procedures had not been established for laboratory fluorometry operations, but acknowledges that written procedures had not been established for determination of mill worker exposures, conversion of fixed alpha contamination to units of measurement specified in License Annex A, and administrative control and frequency specification for instrument calibration.

(2) Explanation. UCC had procedures for laboratory fluorometry operations at the time of the inspection. The procedures may appear to be difficult to read and interpret because of their complexity, but UCC does not understand how NRC can state that these procedures were not established.

UCC has determined the exposure of its Gas Hills mill workers to airborne radionuclides since the operation began, and correct exposure calculations for mill workers were in existence at the time of the NRC inspection. Because these time-weighted exposure records have always been available and because the weekly calculation sheets for individual employees show a formula for exposure calculations, there was never a reason to question the existence of procedures for making exposure calculations.

UCC converts fixed alpha contamination survey data into units of measurement specified in License Annex A. The lack of a written procedure showing this simple calculation was an oversight. However, correct data and results exist.

License Condition 25 states that instrument calibration must be performed at least semi-annually. UCC saw no reason to repeat the statement of this condition in its calibration procedures.

(3) Corrective steps. UCC will rewrite its non-operational procedures to correct the above-mentioned deficiencies. Without admitting a violation with respect to the procedures for laboratory fluorometry operations, we have decided to revise these procedures by May 1, 1984 to achieve greater clarity.

(4) Avoidance of further violation. UCC will review the procedures during its semi-annual internal radiation audits to assure full compliance with this license condition.

(5) Full compliance date. For those activities for which UCC admits that written procedures were lacking, we expect to have approved written procedures in place by May 1, 1984.

b.

(1) Admission or denial. The violation occurred.

(2) Explanation. The RCSO had reviewed and approved all of the written procedures, but had failed to note this approval in writing. The RCSO had assisted in writing many of the non-operational procedures. The operational procedures were written by the Mill Department Head in late 1981 and reviewed by all members of the Radiation Audit and ALARA committee at a meeting on February 18, 1982.

(3) Corrective steps. The RCSO has reviewed and approved in writing most of the procedures. Some of the procedures, however, as noted in III, B, a, (3), are in the process of being rewritten. Before implementation of those rewritten procedures, the RCSO will review them and approve them in writing. The last of the procedures is expected to be rewritten and approved by May 1, 1984.

(4) Avoidance of further violation. In the future all new or revised procedures will contain a signature block for the signature, upon his/her approval, by the RCSO. Compliance will be assured by UCC's internal radiation audits.

(5) Full compliance date. Valid procedures have been approved in writing by the RCSO. (As for those procedures requiring revision, see item (3) above.)

IV. ALLEGED VIOLATION 4.

A. "License Condition 31 requires, in part, that administrative offices shall be surveyed monthly for surface contamination and that survey results shall be compared with limits specified in License Annex A. License Annex A specifies limits for both fixed and removable contamination.

Contrary to this requirement, surveys for fixed contamination had not been performed in administrative offices since August 1982."

B. RESPONSE

(1) Admission or denial. A violation occurred in that only surveys for removable alpha contamination were being performed in the administrative offices.

(2) Explanation. The licensee misinterpreted the license condition when the alpha survey program was established. The license condition reads:

"..... licensee shall conduct at least weekly a surface contamination survey (both smear and total contamination) in all eating areas, change rooms, and control rooms. Administrative offices shall be surveyed for surface contamination at least monthly....."

The licensee interpreted the second sentence requiring surveys for surface contamination in the administrative offices as being a requirement for smear testing only. Smear and total contamination were, of course, being checked in the mill offices and lunch rooms.

(3) Corrective steps. Surveys for total alpha contamination have been performed since the NRC inspection.

(4) Avoidance of further violation. The surveys are documented and subject to internal audit.

(5) Full compliance date. Compliance has been effective since August, 1983.

V. ALLEGED VIOLATION 5.

A. "License Condition 42(i) issued June 30, 1982, requires, in part, that the licensee shall submit by May 1, 1983, for review and approval in the form of a license amendment, a detailed plan for (1) a lined evaporation pond for use in seepage and surface water collection, or (2) the collection and rerouting of such water and seepage to the mill circuit.

Contrary to this requirement, a plan had not been submitted at the time of the inspection on August 23, 1983."

B. RESPONSE

(1) Admission or denial. The violation occurred.

(2) Explanation. UCC had determined that alternative (1) for a lined evaporation pond was not feasible due to:

a) difficulty of determining accurately the quantity of water to be evaporated and consequently the size of the pond and liner, and

b) difficulty of providing a location for the pond:

(i) Locating the pond atop the inactive tailings pile was precluded by License Condition 70 which required the licensee to "... recontour the surface of all tailings pile surface areas to prevent ponding of water from precipitation ..." and

(ii) Locating the pond at another location proved infeasible because a site could not be developed at reasonable cost and delays were foreseen because of the necessity of obtaining a permit from the Wyoming Department of Environmental Quality.

Alternative (2) had been placed in effect by pumping water from the seepage collection sumps to tanker trucks and returning the water to the mill circuit by discharging into the north evaporation pond. NRC staff had been informed of this procedure and had seen the arrangement during a visit on July 28, 1983. UCC had intended to continue this procedure and submit the required plan. However, during discussions for amending License Condition 47 (increasing the capacity of the A-9 below grade tailings impoundment), NRC staff had questioned the ability of the A-9 disposal area and associated evaporation ponds to evaporate current residual mill circuit water, thus, in turn, calling into question the ability of the mill circuit to accept the water added from the inactive tailings seepage. UCC was, and still is, discussing with NRC staff the issue of evaporation capacity (we believe increased capacity can be provided by installation of spray evaporation systems). While attention was being concentrated on this problem, UCC delayed submitting the plan required by License Condition 42(i) and omitted to request, in the form of a further license amendment, an extension to the deadline of May 1, 1983.

(3) Corrective steps. The plan for alternative (2) was submitted on December 5, 1983. Since June 1, 1983 mill operations have been closed down; hence, the difficulty caused by the questionable evaporative capacity of the A-9 mill tailings system no

longer exists. The date of resumption of mill operations is still uncertain.

(4) Avoidance of further violation. The unique nature of this violation precludes its recurrence.

(5) Full compliance date. December 5, 1983.

VI. ALLEGED VIOLATION 6.

A. "License Condition 53(d) requires that slurry transport lines and lines from the A-9 pit shall be examined monthly using an ultrasonic device at locations where a rupture of the pipe could be expected to affect the stability of the embankment.

Contrary to this requirement, monthly examinations were performed only once since February 1983."

B. RESPONSE

(1) Admission or denial. The violation occurred.

(2) Explanation. During the period when monthly examinations were being carried out, no reduction of pipe thicknesses had been detected. UCC was considering requesting NRC for a license amendment to extend the monitoring interval or give consideration to alternative methods, but had omitted to do so due to priorities in other areas of license compliance, and amendment requests. During inspections required by License Condition 53(e), the embankments were visually inspected for signs of leakage from slurry and other lines passing through the embankments.

(3) Corrective steps. Monthly examinations as required by the license condition have been re-established.

(4) Avoidance of further violation. The re-established examinations are documented and subject to internal UCC audits.

(5) Full compliance date. Compliance has been effective since September, 1983.

VII. ALLEGED VIOLATION 7.

A. "License Condition 56 requires, in part, that the licensee shall implement the environmental monitoring program summarized in Table 6.9 of the final Environmental Statement Related to the Operation of Gas Hills Uranium Projects (NUREG-0702) and shall provide at least semiannual documented management audits to determine the adequacy of program implementation.

Contrary to this requirement:

a. Although Table 6.9 stipulates that the yellowcake effluent stack shall be sampled quarterly, this stack was sampled only twice during 1982.

b. Only one semiannual audit had been performed since August 1982."

B. RESPONSE

a.

(1) Admission or denial. The violation occurred.

(2) Explanation. A contractor sampled the yellowcake effluent stack in March, 1982. In June, 1982, UCC personnel did carry out the procedure to collect stack samples; the sampling was actually performed, but discarded because the calculations indicated that the sample was not isokinetic. UCC personnel successfully sampled the stack in September, 1982, but inclement weather conditions prevented sample collection in December, 1982.

(3) Corrective steps. Yellowcake effluent stack sampling was performed on schedule in March and June, 1983 (1st and 2nd quarters). No samples have been collected since because the mill was shut down on June 1, and the drier on June 22, 1983.

(4) Avoidance of further violation. A shelter has been constructed to enable sampling to be carried out in the event of inclement weather. The sampling is documented and subject to internal audit. In the future, should UCC foresee that it is having difficulty in meeting the requirements of this license condition, it will notify the NRC and seek to obtain an extension of time for doing the required sampling.

(5) Full compliance date. Full compliance is effective, and was effective, before the date of the NRC inspection in August, 1983.

b.

(1) Admission or denial. The violation occurred in 1982. No such violations have occurred in 1983.

(2) Explanation. UCC considered that the semiannual report on the ALARA program and the detailed information therein as required by License Condition 17 sufficient to fulfill the required semiannual audits mentioned in the final paragraph of License Condition 56 on page 18 of the license. Since 1981, an annual Metals Division radiation audit of the Gas Hills operation has been conducted by a UCC Grand Junction team comprised of radiation safety, industrial health and hygiene, and environmental specialists.

(3) Corrective steps. The Division annual audit mentioned above is established as one of the required audits. A second audit will be performed by the Gas Hill staff each year.

(4) Avoidance of further violation. The audits are documented, and the audit done by the Gas Hills staff is itself subject to review as part of the Division audit.

(5) Full compliance date. UCC is in compliance with this condition for 1983. On March 14-16, 1983, a Metals Division audit took place and is documented. On November 29, 1983, an audit was done by the Gas Hills staff. It, too, is documented.

VIII. ALLEGED VIOLATION 8.

A. "License Condition 38 requires, in part, that results of semiannual fire drills, including remedial actions, shall be documented.

Contrary to this requirement, results of drills conducted during August, 1982 and March, 1983 were not documented."

B. RESPONSE

(1) Admission or denial. The violation occurred.

(2) Explanation. Fire drills were scheduled and carried out in accordance with the license condition. The documentation system then in force was an entry in the mill operator's log by the Fire Chief conducting the drill. By oversight the entries were not made in August, 1982 and March, 1983.

(3) Corrective steps. Responsibility for scheduling, observing, and documenting the required fire drills has been assigned to the Gas Hills Safety Coordinator. A report sheet has to be filed which includes an evaluation of the drill, and specific remedial actions, if any, that may be required.

(4) Avoidance of further violation. The documentation required by (3) above is subject to internal audits.

(5) Full compliance date. A fire drill held on October 21, 1983 was documented in full compliance with the license condition.

PART TWO

In accordance with the provisions of 10 CFR 2.205(b), Union Carbide Corporation hereby protests the proposed imposition of a civil penalty and requests remission, or, at a minimum, mitigation of the penalty.

The stated purpose of the NRC enforcement program is to promote and protect the radiological health and safety of the public as well as licensee employees, and the environment. To achieve this purpose, the NRC's enforcement program aims to obtain prompt

correction of non-compliance, deter future non-compliance and encourage improvement of licensee performance. The more serious the violation, the more severe the enforcement sanctions chosen by the NRC. In UCC's opinion, the elevated enforcement sanctions applied in this case (civil penalties and recategorization of severity level rating) are not warranted. Further, the aims of the NRC enforcement program have been achieved without application of such elevated sanctions.

In its relations with the NRC, UCC has consistently demonstrated a cooperative attitude, whether in negotiating license conditions or, subsequently, in its commitment to comply with the conditions incorporated into its license. UCC does not deny that minor deficiencies in compliance have been found during NRC inspections of its Gas Hills, Wyoming facility or during its own internal audits. However, in all cases, UCC has shown good faith in expeditiously correcting such deficiencies and in its continuing efforts to monitor the extensive, detailed conditions embodied in its license to ensure effective compliance.

UCC is a responsible licensee, has committed no act which can be interpreted as careless disregard of requirements, deception, or other indications of willfulness, and reaffirms its determination to conduct safe operations in full compliance with its license.

UCC therefore feels that NRC's determination that the eight alleged violations be assigned a Severity Level III rating in the aggregate and a \$4000 cumulative civil penalty is, in this case, inappropriate. After the inspection close-out conference on August 25, 1983, UCC initiated steps to promptly correct violations identified during the August, 1983 NRC inspection which UCC, itself, had not previously identified and corrected. Immediately after the Enforcement Conference held on September 21, 1983, UCC wrote a letter (copy enclosed) to Mr. Collins, Regional Administrator, Region IV, NRC confirming the actions already taken, or being taken, to correct the items in non-compliance. UCC was not favored with a reply to, or an acknowledgement of, this letter. We believe that letter together with the more detailed responses contained in this letter confirm UCC responsiveness to NRC concerns, its commitment to protection of radiological health and safety of the public, its employees and the environment, and its continuing good faith efforts to achieve and maintain compliance with its license conditions.

At the inspection close-out conference at UCC's Gas Hills office on August 25, 1983 and at the Enforcement Conference on September 21, 1983, the NRC inspector stated that seven of the alleged violations would be assigned a Severity Level IV classification and one (deficient fire drill documentation), a Severity Level V. NRC representatives acknowledged that none of the alleged violations were a threat to public or employee safety or the environment, but that collectively, as also alleged in the Notice of Violation, they represent "a breakdown in management oversight and control of the radiation safety program."

UCC recognizes that, even if the individual violations were assigned Severity Level IV or V classifications in the Notice of Violation, NRC has the authority to assess civil penalties. While we would still protest the imposition of penalties, we are especially concerned with NRC's characterization of these violations. Union Carbide vigorously denies that these violations indicate a breakdown in management oversight and control and protests the Severity Level III collective classification. Even if these violations were symptomatic of program deficiencies (which we deny), we do not believe a Severity Level III classification is appropriate. Rather, we believe the severity levels (IV and V) indicated at the August 25 and September 21 meetings are more fitting.

As required by the Notice of Violation, for each of the alleged violations (referenced 1 to 8 to conform to the Notice of Violation and Part I of this response) Union Carbide addresses below the five factors contained in Section IV. B of 10 CFR Part 2, Appendix C.

1. A. Prompt Identification and Reporting. The mill operations and scrubber were shut down on June, 1983. Procedures and shift reports are scheduled for revision during inactive periods. We believe that this non-compliance would have been detected during a UCC internal audit or inspection or revision of procedures.

B. Corrective Action to Prevent Recurrence. See page 2, Part One, I, B, (2) through (5).

C. Enforcement History. Union Carbide has not previously been cited for a violation of this license condition.

D. Prior Notice of Similar Events. UCC took effective steps to correct this deficiency as soon as it became apprised of the problem (see B, above).

E. Multiple Occurrences. Not applicable.

2.a.A. Prompt Identification and Reporting. For reasons set forth on page 2-3, Part One, II, B, a, (2), Union Carbide denies this violation. Because we considered our calibration procedure to be in compliance with the license condition, internal UCC audits may not have detected this alleged violation.

B. Corrective Action to Prevent Recurrence. Despite our denial of this alleged violation, we have changed our procedure. See page 2-3, Part One, II, B, a, (2) through (4).

C. Enforcement History. Same as 1 above.

D. Prior Notice of Similar Events. Same as 1 above.

E. Multiple Occurrences. Same as 1 above.

b.A. Prompt Identification and Reporting. As discussed on page 3, Part One, II, B, b, (1) through (4), UCC identified and promptly corrected the violation before the NRC August inspection.

B. Corrective Action to Prevent Recurrence. See page 3, Part One, II, B, b, (2) through (5).

C. Enforcement History. Same as 1 above.

D. Prior Notice of Similar Events. Same as 1 above.

E. Multiple Occurrences. Same as 1 above.

3.a.A. Prompt Identification and Reporting. With regard to those deficiencies which we have admitted (see page 4, Part One, III, B, a, (1)), we believe that internal UCC audits would have detected these deficiencies and required their correction. See also page 4-5, Part One, III, B, a, (2).

B. Corrective Action to Prevent Recurrence. See page 5, Part One, III, B, a, (3) through (5).

C. Enforcement History. Same as 1 above.

D. Prior Notice of Similar Events. Same as 1 above.

E. Multiple Occurrences. Same as 1 above.

b.A. Prompt Identification and Reporting. UCC admits that procedures had not been approved in writing by the RCSO. See Page 5, Part One, III, B, b, (1). We believe that this deficiency would have been detected and corrected as a result of internal audits. See also page 5, Part One, III, B, b, (2).

B. Corrective Action to Prevent Recurrence. See page 5, Part One, III, B, a, (3) through (5).

C. Enforcement History. Same as 1 above.

D. Prior Notice of Similar Events. Same as 1 above.

E. Multiple Occurrences. Same as 1 above.

4. A. Prompt Identification and Reporting. Because of UCC's interpretation of the license condition in question, internal UCC audits may not have detected this deficiency. See page 6, Part One, IV, B, (2).

B. Corrective Action to Prevent Recurrence. As a result of the NRC inspection in August, 1983, both smear and total contamination testing, not just the former, are conducted in administrative offices. See page 6, Part One, IV, B, (3) through

(5). Because of the low results obtained during fixed surveys, we intend to request a license amendment to perform only fixed alpha surveys and to use the removable limits in License Annex A as the control limit. In the meantime, fixed surveys are being conducted.

C. Enforcement History. Same as 1 above.

D. Prior Notice of Similar Event. Same as 1 above.

E. Multiple Occurrences. Same as 1 above.

5. A. Prompt Identification and Reporting. We direct your attention to the explanation provided on Page 7, Part One, V, B, (2).

B. Corrective Action to Prevent Recurrence. See Page 7-8, Part One, V, B, (3) through (5). At no time was there any likelihood or danger that seepage water would be discharged to the environment.

C. Enforcement History. Same as 1 above.

D. Prior Notice of Similar Events. Same as 1 above.

E. Multiple Occurrences. Same as 1 above.

6. A. Prompt Identification and Reporting. We believe that this non-compliance would have been identified by an internal inspection and audit and would have led to a request for a license amendment; a course of action we are currently considering.

B. Corrective Action to Prevent Recurrence. See Page 8, Part One, VI, B, (3) through (5). In our opinion, detection of a rupture due to embrittlement of a pipe and/or excessive external loading (the most probably cause) is extremely unlikely using an ultrasonic device once a month. Other methods would protect an embankment and provide visual evidence of rupture. However, until submission and approval of a license amendment, monthly ultrasonic testing will continue.

C. Enforcement History. Same as 1 above.

D. Prior Notice of Similar Events. Same as 1 above.

E. Multiple Occurrences. Same as 1 above.

7.a.A. Prompt Identification and Reporting. As discussed on Page 9, Part One, VII, B, a, (1) through (4), UCC identified and corrected this violation before the NRC August inspection.

B. Corrective Action to Prevent Recurrence. See Page 9, Part One, VII, B, a, (3) through (5). In addition to stack

sampling, the Gas Hills off-site air particulate samplers yield a reliable estimate of releases from the Gas Hills operation. These results are all below the MCP's listed in Appendix B, Table II in 10 CFR Part 20.

- C. Enforcement History. Same as 1 above.
- D. Prior Notice of Similar Events. Same as 1 above.
- E. Multiple Occurrences. Same as 1 above.
- b. A. Prompt Identification and Reporting. See Page 9, Part One, VII, B, b, (1) and (2).
- B. Corrective Action to Prevent Recurrence. See Page 9-10, Part One, VII, B, b, (2) through (5).
- C. Enforcement History. Same as 1 above.
- D. Prior Notice of Similar Events. Same as 1 above.
- E. Multiple Occurrences. Same as 1 above.
- 8. A. Prompt Identification and Reporting. See Page 10, Part One, VII, B, (2). A requirement resulting from the July 19-20, 1983 UCC Metals Division Safety Audit is that fire, emergency and evacuation plans and drills must be reviewed and, where necessary, upgraded by the end of the year. We are confident that the action following this Audit would have resulted in a correction of the documentation deficiency identified during the NRC inspection.
- B. Corrective Action to Prevent Recurrence. See Page 10, Part One, VII, B, (3) through (5).
- C. Enforcement History. Same as 1 above.
- D. Prior Notice of Similar Events. Same as 1 above.
- E. Multiple Occurrences. Same as 1 above.

To summarize, it is UCC's position that, based upon the facts and mitigating circumstances presented in our response, the aggregation and escalation of the eight alleged violations, each with a severity level of IV or V, to a Severity Level III is not justified under NRC's enforcement policy. We believe we have amply demonstrated that the deficiencies for which we were cited do not show a breakdown in management control of the radiation safety program which warrants a collective Severity Level III classification. UCC management is committed to ensuring compliance with NRC regulations and license conditions. UCC has made and will continue to make good faith efforts to promptly correct problems identified by internal means or by the NRC. We therefore respectfully request assignment of lower severity levels to the

alleged violations and remission, or, at a minimum, mitigation of the proposed civil penalty.

PART THREE

Although not required in response to the Notice of Violation, Mr. Collins' cover letter requested that Union Carbide describe actions taken, or to be taken, to improve the effectiveness of management control of license requirements. We believe that our letter to Mr. Collins following the September 21, 1983 Enforcement Conference and the corrective actions detailed in Part One of this response provide part of the answer.

In Part Two, we have repeatedly stated that we believe that UCC's internal audits would uncover violations of the license. UCC is confident that this is so. However, as the NRC inspector mentioned at the Enforcement Conference when asked why an alleged violation (item 2(a) in the Notice of Violation) had not been cited after earlier inspections, a single audit cannot examine every detail of a complex license with 82 conditions, many of which contain subconditions and numerous references to requirements in other documents. Nonetheless, by use of audits and other management controls, UCC strives to achieve full compliance. Unfortunately, it is unlikely that human error and omission can be totally eliminated.

It is UCC's goal, nevertheless, to maintain total safety in its operations for the public, its employees, and the environment; and to carry on its operations in complete compliance with all laws and regulations. That its safety record is one of the very best in the mining industry, and the uranium and milling industry, is strong evidence of this management commitment. UCC has developed and is continually strengthening its management system in order to attain the goal together with efficient and successful operations. As an example of this, we attach for your information a copy of our recently revised Radiation Control and Safety Policy for the Gas Hills facility.

This concludes our response to the October 3, 1983 Notice of Violation and Imposition of Civil Penalties. Should you have any questions regarding this response, please do not hesitate to contact me. We look forward to your prompt response to our request regarding remission or mitigation of the proposed civil penalty and the assignment of lower severity levels to the alleged violations.

Very truly yours,


E.W. Shortridge

Encl.



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

FEB 10 1984

Docket No: 040-00299
License No: SUA-648
EA 83-108

Union Carbide Corporation
Metals Division
ATTN: E. W. Shortridge
Uranium Production Manager
P. O. Box 1029
Grand Junction, Colorado 81502

Gentlemen:

This refers to your letter of September 26, 1983, and your letter of December 9, 1983, in response to the Notice of Violation and Proposed Imposition of Civil Penalties sent to you with our letter of November 3, 1983. Our letter concerned violations found during the inspection of August 23-25, 1983.

In your responses, you expressed disagreement with our conclusion that a breakdown in the management control and oversight of the radiation safety program had occurred at the Gas Hills Uranium Mill and with our conclusion that the eight violations should be classified in the aggregate as a Severity Level III problem. Your responses characterized the violations to be of minor safety or environmental significance, to be no more than Severity Level IV and V violations, and not to warrant civil penalties. You also stated that the penalties should be mitigated on the basis of your contention that your audit program has or would have detected, corrected, and reported the problems expeditiously and effectively.

Under NRC regulations and Union Carbide's license conditions, Union Carbide is obligated to develop a program that will minimize employee exposure to radiation. As part of that program, Union Carbide is required to provide written procedures, report operating activities, calibrate certain instruments and conduct certain surveys and surveillance activities on a regular basis. The NRC inspection found eight violations involving failure to adhere to license conditions which, if each was viewed in isolation, might be categorized individually as a Severity Level IV or V violation. Because of the number of violations and the length of time over which they occurred, the violations appear to be symptomatic of programmatic deficiencies, rather than isolated concerns, and, as a result, have been collectively categorized as a Severity Level III problem as permitted by the NRC's Enforcement Policy, 10 CFR Part 2, Appendix C. The NRC believes the violations resulted from a breakdown in management control and oversight of the radiation safety program.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

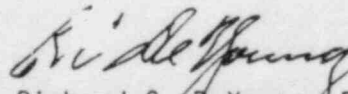
The NRC expects licensees to maintain meticulous attention to detail in the conduct of licensed activities. Union Carbide Corporation is not only responsible for development of a satisfactory safety program, establishment of adequate procedures to implement the program, and training of personnel in the use of procedures, but it is also responsible for maintaining adequate control and oversight of its program to ensure adherence to procedures. It is also responsible for identification of possible violations, and prompt correction of violations, including actions to prevent recurrence. None of the violations were identified by Union Carbide.

With regard to your contention that your audit program has or would have detected, corrected, and reported problems expeditiously and effectively, it is apparent from your own admission that your audit program did not detect, correct, and report the identified violations. You have not submitted any information to support your claim that the violations would have been identified during a future audit. You have not presented any audit report documentation either during the inspection or afterward to support the claim that your audit program identified those items that were later corrected. An effective audit program would result in a high degree of compliance with license requirements.

After careful consideration of your response, we have concluded for the reasons given in the enclosed Order and Appendix that your response did not provide a sufficient basis for mitigation of the proposed penalties. Accordingly, we hereby serve the enclosed Order on Union Carbide Corporation imposing civil penalties in the amount of Four Thousand Dollars.

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 Order will be placed in the Public Document Room.

Sincerely,



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Order Imposing Civil
Monetary Penalties and Appendix

had violated, and the amount of civil penalties proposed. An answer dated December 9, 1983 to the Notice of Violation and Proposed Imposition of Civil Penalties was received from the licensee.

III

Upon consideration of the answers received and the statements of fact, explanation, and arguments for remission or mitigation of the proposed civil penalties contained therein, as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined 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 (42 U.S.C. 2282, P.L. 96-295) and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay civil penalties in the total amount of Four Thousand Dollars 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 of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

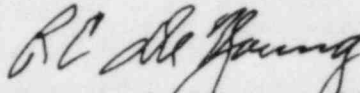
The licensee may, within 30 days of the date of this Order, request a hearing. A request for hearing shall be addressed to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. A copy of any request for hearing shall also be sent to the Executive Legal Director at the same address. If a hearing is requested, the Commission will issue an Order designating the time and place of hearing. Upon failure of the licensee to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings and, 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 violated NRC requirements set forth in the Notice of Violation and Proposed Imposition of Civil Penalties, as modified by the Appendix to this Order; and

(b) whether, on the basis of such violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
the 10 day of February 1984

APPENDIX

EVALUATIONS AND CONCLUSIONS

For each violation identified in the Notice of Violation (dated November 3, 1983) the original violation is restated and the NRC's evaluation and conclusion regarding the licensee's response (in letters dated September 26, 1983 and December 9, 1983) to each item is presented.

Item 1

Statement of Violation

License Condition 22 requires either hourly checks to verify operation of the yellowcake dryer scrubber or use of an audible alarm to signal system failure. Use of an audible alarm requires that its function be checked daily.

Contrary to this requirement, though the licensee had chosen the option of using an audible alarm, its function had not been checked on a daily basis since August 1982.

Evaluation and Conclusion

The licensee has admitted the violation and has identified no mitigating circumstances.

Item 2

Statement of Violation

License Condition 25 requires, in part, that all radiation monitoring, sampling, and detection equipment shall be recalibrated after each repair and as recommended by the manufacturer or at least semiannually, whichever is more frequent.

Contrary to this requirement:

- a. Instrumentation used to analyze radon daughter samples had not been properly calibrated since August 1982.
- b. Instrumentation used to perform gamma exposure rate measurements at the mill had not been calibrated from March 1982 to February 1983.

Evaluation and Conclusion

The licensee has denied the first part of the violation on the basis that the instrumentation used to analyze radon daughter samples had been calibrated by the Mine Safety and Health Administration (MSHA) and later "checked against a low level source" by the licensee.

The NRC inspection examined the licensee's calibration records and concluded that the calibration did not meet the requirements of License Condition 25.

The calibration by MSHA was performed at a level more than 200 times that of the ambient radon levels to be measured by the device. Thus, this calibration did not demonstrate the instrument's accuracy in the lower ranges for which it was used. The licensee's "check" of its radon instrumentation against a low level source is not considered adequate to meet the requirements of License Condition 25 since a check of an instrument is not as extensive as a calibration.

The licensee has admitted the remainder of the violation regarding failure to calibrate gamma exposure rate instrumentation and has identified no mitigating circumstances. Therefore, the information presented does not provide an adequate basis for modification or withdrawal of this violation.

Item 3

Statement of Violation

License Condition 30 requires, in part, that written procedures shall be established for nonoperational activities to include in-plant and environmental monitoring, bioassay analysis, and instrument calibrations. All written procedures shall be reviewed and approved in writing by the radiation safety officer before implementation and whenever a change in procedure is proposed.

Contrary to these requirements:

- a. Procedures had not been established for the following activities:
 - (1) Determination of exposure of uranium mill workers to airborne radionuclides.
 - (2) Conversion of fixed alpha contamination survey data to units of measurement specified in License Annex A.
 - (3) Administrative control and frequency specification for instrument calibration.
 - (4) Laboratory fluorometry operations including calibration standard preparation, and sample dilution.
- b. Written procedures had not been approved in writing by the radiation safety officer.

Evaluation and Conclusion

The licensee has admitted all but a small portion of this violation. The licensee contests the NRC claim that procedures had not been established for laboratory fluorometry operations including calibration standard preparation, and sample dilution. NRC agrees that the licensee had some guidance on laboratory fluorometry operations, but this guidance was inadequate concerning calibration standard preparation and sample dilution because, as the licensee admits in its response, the guidance was "difficult to read and interpret." Therefore, it did not meet the license requirements.

The NRC considers this a valid violation and does not consider the licensee's response to provide a basis for withdrawal of this violation.

Item 4

Statement of Violation

License Condition 31 requires, in part, that administrative offices shall be surveyed for surface contamination and that survey results shall be compared with limits specified in License Annex A. License Annex A specifies limits for both fixed and removable contamination.

Contrary to this requirement, surveys for fixed contamination had not been performed in administrative offices since August 1982.

Evaluation and Conclusion

The licensee has admitted the violation and has identified no mitigating circumstances.

Item 5

Statement of Violation

License Condition 42(i) issued June 30, 1982, requires, in part, that the licensee shall submit by May 1, 1983, for review and approval in the form of a license amendment, a detailed plan for: (1) a lined evaporation pond for use in seepage and surface water collection, and (2) the collection and rerouting of such water seepage to the mill circuit.

Contrary to this requirement, a plan had not been submitted at the time of the inspection on August 23, 1983.

Evaluation and Conclusion

The licensee has admitted the violation and has identified no mitigating circumstances.

Item 6

Statement of Violation

License Condition 53(d) requires that slurry transport lines and lines from the A-9 pit shall be examined monthly using an ultrasonic device at locations where a rupture of the pipe could be expected to affect the stability of an embankment.

Contrary to this requirement, only one examination was performed since February 1983.

Evaluation and Conclusion

The licensee has admitted the violation and has identified no mitigating circumstances.

Item 7Statement of Violation

License Condition 56 requires, in part, that the licensee shall implement the environmental monitoring program summarized in Table 6.9 of the Final Environmental Statement related to the Operation of Gas Hills Uranium Projects (NUREG-0702) and shall provide at least semiannual documented management audits to determine the adequacy of program implementation.

Contrary to this requirement:

- a. Although Table 6.9 stipulates that the yellowcake effluent stack shall be sampled quarterly, this stack was sampled only twice during 1982.
- b. Semiannual audits have not been performed since August 1982.

Evaluation and Conclusion

The licensee has admitted that it did not conduct the required number of samples and audits in 1982, but asserted that it had conducted the required semiannual audit in 1983. Because of the licensee's admitted failure to comply with the requirements in 1982, a violation of the requirement did occur.

Item 8Statement of Violation

License Condition 38 requires, in part, that results of semiannual fire drills, including remedial actions, shall be documented.

Contrary to this requirement, results of drills conducted during August 1982 and March 1983 were not documented.

Evaluation and Conclusion

The licensee has admitted the violation and has identified no mitigating corrective action.

Evaluation and Conclusion with Respect to Licensee's Request for Mitigation of the Proposed Civil Penalty

The licensee's response to the eight violations above does not provide a sufficient basis for mitigation of the proposed penalty. In fact, UCC has admitted that all or part of the above mentioned violations occurred, and

except for a portion of one violation, the NRC believes that the remainder of the violations occurred as originally stated.

In seeking mitigation or remission of the proposed penalty, the licensee asks that the violations be reclassified as Severity Level IV or V violations. In the licensee's view, the violations do not indicate a breakdown in management's oversight and control of licensed activities and, hence, do not warrant the classification in the aggregate as a Severity Level III problem. As further bases for mitigation, the licensee points to the fact that it initiated corrective actions for the violations and argues that it would have detected the violations during future audits.

If they were viewed in isolation, the violations might well be classified individually at Severity Level IV or V under the enforcement policy. However, the number of violations and the length of time over which they occurred suggest that programmatic deficiencies exist in Union Carbide's implementation of its radiation protection program. The nature, number, and duration of the violations warrant categorization in the aggregate as a Severity Level III problem.

The licensee's claim that it would have detected a number of the violations during future audits is speculative at best. In point of fact, the licensee's audit program did not detect the violations identified in the Notice of Violation. While the enforcement policy permits mitigation of civil penalties for self-identification and prompt reporting of violations by licensees, mitigation is not appropriate here for the possibility that the licensee might have discovered some of the violations on its own.

The staff acknowledges that the licensee has taken corrective action for the violations. However, corrective action is always required to correct violations. In this instance, the licensee's corrective actions were not unusually prompt and extensive, but are only those that the NRC would expect the licensee to take.

Conclusion

The licensee has not provided an adequate basis for mitigation of the proposed civil penalty. Accordingly, the civil penalty remains at Four Thousand Dollars.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
831 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

OCT 07 1983

Docket No. 30-11579
License No. 37-15445-02
EA 83-81

U.S. Testing Company, Inc.
ATTN: Mr. I. J. Fuchs
Executive Vice President
1415 Park Avenue
Hoboken, New Jersey 07030

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

This refers to the NRC special safety inspection conducted on June 22-23, 1983, of activities authorized by NRC License No. 37-15445-02. The inspection was conducted at the U. S. Testing Company, Inc. main office in Hoboken, New Jersey, and also at the offices of your consultant organization, Automation Industries, Phoenixville, Pennsylvania, to review the circumstances associated with an exposure in excess of regulatory limits to the hand of an employee of Automation Industries. The report of the inspection was forwarded to you on July 29, 1983. During the inspection, additional violations of NRC requirements were identified. These violations, their causes, and your corrective actions were discussed at an enforcement conference held in the Region I office with Mr. G. Basile and other members of your staff on August 3, 1983.

The violations which are described in the enclosed Notice indicate that emergency procedures were not followed, adequate surveys were not performed, adequate evaluations were not made during the retrieval of a disconnected 47-curie iridium-192 source, and adequate evaluations of the exposure received by an individual were not subsequently performed. As a result, an employee of Automation Industries, Inc., acting as a consultant for U.S. Testing Company, Inc., received a radiation exposure between 650 and 1100 rem to the index finger and thumb of one of his hands. The NRC considers overexposures, particularly of this magnitude, to be very serious.

To emphasize the responsibility of licensees to properly control their licensed activities, particularly the control of radiography sources which have such a high potential for serious exposure to workers and members of the public, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Eight Thousand Dollars (\$8,000) for the violations set forth in Section I of the enclosed Notice. The three violations for which civil penalties are being proposed have been categorized in the aggregate as a Severity Level I event in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C), 47 FR 9987 (March 9, 1982)).

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

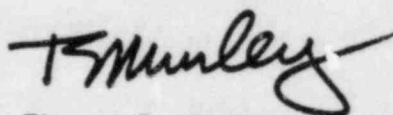
OCT 07 1983

You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. Your response, and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

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 enclosure 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,



Thomas E. Murley
Regional Administrator

Enclosure:
Notice of Violation and
Proposed Imposition of Civil Penalties

cc:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
Commonwealth of Pennsylvania
State of New Jersey

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

U. S. Testing Company, Inc.
1415 Park Avenue
Hoboken, New Jersey 07030

Docket No. 30-11579
License No. 37-15445-02
EA No. 83-81

An NRC special safety inspection of activities authorized under NRC License No. 37-15445-02 was conducted at U.S. Testing Company, Inc.'s main office in Hoboken, New Jersey, and at the offices of its consultant, Automation Industries, in Phoenixville, Pennsylvania, on June 22-23, 1983 to review the circumstances associated with an exposure in excess of regulatory limits to the hand of an employee of Automation Industries. As a result of the inspection, it was determined emergency procedures were not followed, adequate surveys were not performed, adequate evaluations were not made during the retrieval of a disconnected 47-curie iridium-192 source, and adequate evaluations of the exposure received by an individual were not subsequently performed. As a result, an employee of Automation Industries, Inc., acting as a consultant for U.S. Testing Company, Inc., received a radiation exposure to the index finger and thumb of one of his hands calculated by the NRC to be between 650 and 1100 rem.

To emphasize the responsibility of licensees to properly control their licensed activities, particularly the control of radiography sources which have such a high potential for serious exposure to workers and members of the public, the Nuclear Regulatory Commission proposes the imposition of cumulative civil penalties in the amount of Eight Thousand Dollars for the violations associated with this Severity Level I matter. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, 47 FR 9987 (March 9, 1982), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the violations and the associated civil penalties are set forth in Section I below:

I. VIOLATIONS ASSESSED CIVIL PENALTIES

- A. 10 CFR 20.101(a) prohibits the use of licensed material in such a manner as to cause any individual in a restricted area to receive in any calendar quarter from radioactive materials or other sources of radiation a total occupational radiation dose in excess of 18.75 rem to the hands.

Contrary to the above,

During the second calendar quarter of 1983, specifically on June 10, 1983, an employee of Automation Industries, Inc., acting as a consultant for U.S. Testing Company, Inc., while attempting to retrieve a 47-curie iridium-192 source that had disconnected from a U.S. Testing Company, Inc. radiography device, received a radiation exposure to the index finger and thumb of one of his hands calculated to be between 650 and 1100 rem.

B. 10 CFR 20.201(b) requires that each licensee make such surveys as (1) are necessary to comply with regulations in 10 CFR 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 radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above,

1. On June 10, 1983, an adequate survey was not performed prior to the attempt to recover a disconnected 47-curie iridium-192 source from its radiography device, in that the position of the source was not located prior to handling the equipment.
2. Prior to June 23, 1983, an evaluation made of the radiation dose to the hands of the individual was inadequate in that it did not consider the exposure to the thumb and index finger of an individual who performed the source retrieval on June 10, 1983.

Collectively, these three violations have been evaluated as a Severity Level I event (Supplement IV). (Cumulative civil penalty - \$8,000 assessed equally among the violations.)

II. VIOLATION NOT ASSESSED A CIVIL PENALTY

Condition 17 of License No. 37-15445-02 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated November 21, 1979 and January 29, 1982, and letters dated December 18, 1979, November 6, 1980, November 17, 1980, and January 25, 1983.

The November 6, 1980 letter includes the U.S. Testing Company, Inc., Emergency Procedures. Section IV, Part B, Item 2.E., of these Emergency Procedures requires that the Radiation Protection Officer be notified immediately if a radiography source cannot be verified to be in a fully shielded position.

Contrary to the above, on June 9, 1983, the Radiation Protection Officer was not immediately notified when a source could not be verified to be in a fully shielded position. The radiographers attempted to return the source to the shielded position prior to notifying the Radiation Protection Officer.

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

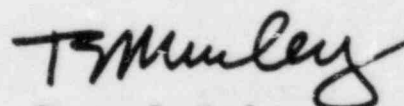
Pursuant to the provisions of 10 CFR 2.201, U.S. Testing Company, Inc. is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC,

Washington, DC 20555, with a copy to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including 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 will be 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. We note that you have provided some of this information in your August 19, 1983 letter to the Director, Division of Engineering and Technical Programs, Region I. Therefore, in your response, references to the August 19, 1983 letter are acceptable where appropriate. 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, U.S. Testing Company, Inc. may pay the civil penalties in the amount of Eight Thousand Dollars (\$8,000) or may protest imposition of the civil penalties in whole or in part by a written answer. Should U.S. Testing Company, Inc. fail to answer within the time specified, the Director, Office of Inspection and Enforcement will issue an order imposing the civil penalties in the amount proposed above. Should U.S. Testing Company, Inc. elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer 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 in whole or in part, such answer may request remission or mitigation of the penalties. In requesting mitigation of the proposed penalties, the five factors contained in Section IV.B of 10 CFR Part 2, Appendix C 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 by specific references (e.g., citing page and paragraph numbers) to avoid repetition. The attention of U.S. Testing Company, Inc. 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 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 penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION

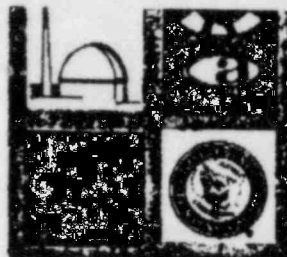


Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 7 day of October 1983

United States Testing Company, Inc.
Quality Assurance Services Group

1415 PARK AVENUE
HOBOKEN, NEW JERSEY 07030 (201) 792-2400 (212) 943-0488



- Vendor Surveillance & Inspection Division
- Plant Retrofit/Outage Support Division
- Quality Programs Division
- Nondestructive Examination Division

October 27, 1983

Director
Office of Inspection & Enforcement
United States Nuclear Regulatory Commission
Washington, D. C. 20555

References: Docket No. 30-11579
License No. 37-15445-02
EA No. 83-81

Gentlemen:

In accordance with 10 CFR 2.205(b), we are writing to protest portions of the Notice of Violation issued by Region 1 dated October 7, 1983.

The specific response to said notice, as required by 10 CFR 2.201, has been made, and accompanies this letter. As instructed by this notice, reference will be made to that response, where appropriate, to avoid duplication. Each of the specific violations cited will be addressed.

Violation 1

The thumb and index finger of one hand of an employee of Automation Industries, Inc. (A. I.) received a calculated exposure of 650-1100 Rem while conducting a retrieval of a 47-Curie Iridium-192 sealed source separated from a United States Testing Company, Inc. (USTC) exposure device.

USTC does not deny that this exposure took place as alleged, but submits that the regulations are unclear with respect to the responsibility of the Licensee for exposure to a "worker" performing an emergency retrieval of a disconnected source. The requirements of 10 CFR 20 establish limits to the exposure of "individuals" to licensed materials under the control of the Licensee. The exposure being cited occurred to an employee of an agency independently licensed by the NRC which has been publicly offering this emergency service for many years. During the Enforcement Conference at NRC

United States Testing Company, Inc.

Office of Inspection & Enforcement
United States Nuclear Regulatory Commission

October 27, 1983
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Region 1, the NRC position was that the entire responsibility for the incident rested upon USTC. However, the NRC representatives present admitted that this was a grey area, and indicated that they would consider issuing a bulletin to clarify the responsibilities involved.

As indicated in our response to Violation 1, Item 3, Corrective Steps Taken, we sent a specific questionnaire to potentially qualified sources for emergency assistance (Reference our letter of August 19, 1983 to Director - Region 1). Six requests were sent, with three responses received as of this date. Only one of the three responses was specifically licensed to retrieve industrial radiography sources (Louisiana LA-0006-L01). None of the NRC representative at the Enforcement Conference were able to identify an NRC Licensed agency authorized to conduct retrievals.

We submit that the regulations as they presently exist cover the use of licensed materials under normal conditions, and do not adequately cover emergency conditions, such as a disconnected sealed source. We therefore request remission of at least a portion of the civil penalty proposed for this violation.

Violation 2

An adequate survey was not conducted prior to the attempt to recover the disconnected source.

As indicated in our response to Violation 2, we deny that an adequate survey was not conducted. While we agree that the specific location of the source within the guide tube was not determined, we submit the following:

"10 CFR 20.201(b) (2), with respect to required surveys, states --- and (2) are reasonable under the circumstances to evaluate the radiation hazards that may be present". Instruments conforming to the requirements of 10 CFR 34.24 were used. To make a specific location of the disconnection within the guide tube would have required repeated approaches to the exposed source, applying the available lead shielding, and making an additional survey. This prolonged activity would have obviously resulted in a much greater whole body exposure than the 185 M Rem that the film badge worn by the A. I. employee indicated.

United States Testing Company, Inc.

Office of Inspection & Enforcement
United States Nuclear Regulatory Commission

October 27, 1983
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Considering that the requirements of 10 CFR 20.101(a) apply a weighting factor of 15 to 1 in allowable exposure of extremities versus whole body exposure, we contend that the joint decision of the A. I. employee and the USTC personnel to proceed with the recovery of the source was the most prudent action, rather than a violation.

We therefore request remission of all of the civil penalty proposed for this alleged violation.

Violation 3

The evaluation of the dose to the thumb and index finger of the individual was not performed prior to June 23, 1983.

As indicated in our response to the Notice of Violation, we requested the services of A. I. because USTC does not possess the ring badges and other specialized personal dosimetry devices to monitor exposure under emergency conditions. Immediately following the exposure, the A. I. specialist conducted an evaluation of his exposure, and developed his whole body and ring badges. Prompt and timely notification to NRC was made with our knowledge and concurrence, thus satisfying the requirements of 10 CFR 20.405(a) (1).

We therefore submit that no violation took place, and request remission of all of the civil penalty proposed for this alleged violation.

In consideration of the above, and consideration of the five factors of Appendix IV B of 10 CFR 2, none of which are adverse to our position, the United States Testing Company, Inc. requests remission of the majority of the proposed civil penalty of \$8,000., and would offer an amount of \$4,000. in full settlement of this action.

We fully appreciate the potential hazards involved in personal exposures in excess of regulated limits. We do wish to point out that the news release issued by Region I, No. 1-83-133 specifically stated that there was no radiation hazard to the public, and no current or anticipated health hazards were suffered by the exposed individual.

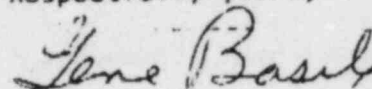
United States Testing Company, Inc.

Office of Inspection & Enforcement
United States Nuclear Regulatory Commission

October 27, 1983
Page 4 of 4

We look forward to your positive response to this request for mitigation of the proposed civil penalties.

Respectfully yours,



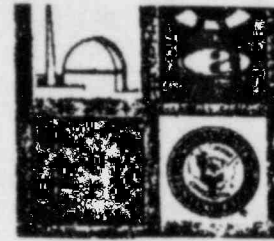
Gene Basite
Group Vice President

GB:jb

cc: USNRC
Region 1
631 Park Avenue
King of Prussia, Pa. 19406

United States Testing Company, Inc.
Quality Assurance Services Group

1415 PARK AVENUE
HOBOKEN, NEW JERSEY 07030 (201) 792-2400 (212) 943-0488



- Vendor Surveillance & Inspection Division
- Plant Retrofit / Outage Support Division
- Quality Programs Division
- Nondestructive Examination Division

October 27, 1983

Director
Office of Inspection & Enforcement
United States Nuclear Regulatory Commission
Washington, D. C. 20555

References: Docket No. 30-11579
 License No. 37-15445-02
 E A No. 83-81

Gentlemen:

In accordance with the requirements of 10 CFR 2.201, we are responding to the Notice of Violation dated October 7, 1983.

Violation 1

On June 10, 1983, an employee of Automation Industries, Inc. (A. I.) while conducting a retrieval of a 47-curie Iridium-192 source that had disconnected from a United States Testing Company, Inc. (USTC) radiography device, received a radiation exposure to the index finger and thumb of one of his hands calculated to be between 650 and 1100 Rem.

Response to Violation 1

1. USTC does not deny that an exposure in excess of the limits provided by 10 CFR 20.101(a) occurred.
2. The excessive exposure occurred because the specific location of the sealed source within the guide tube of the exposure device was not pinpointed by either the A. I. specialist or by USTC personnel on site. (Please see separate discussion of mitigating circumstances submitted in accordance with 10 CFR 2.205).
3. Corrective Steps Taken:
 - a) A detailed prequalification request for potential specialist services has been extended to six (6) logical organizations as of August 24, 1983. (Reference letter to Director, Division of Engineering and Technical Programs, Region I, dated August 19, 1983 - Attachment 3). Requests for qualification information were sent to the following:

OUR REPORTS AND LETTERS ARE FOR THE EXCLUSIVE USE OF THE CLIENT TO WHOM THEY ARE ADDRESSED, AND THEY AND THE NAME OF THE UNITED STATES TESTING COMPANY, INC. OR ITS SEALS OR INSIGNIA, ARE NOT TO BE USED UNDER ANY CIRCUMSTANCES IN ADVERTISING TO THE GENERAL PUBLIC AND MAY NOT BE USED IN ANY OTHER MANNER WITHOUT OUR PRIOR WRITTEN APPROVAL. SAMPLES NOT DESTROYED IN TESTING ARE RETAINED A MAXIMUM OF THIRTY DAYS.

United States Testing Company, Inc.

Office of Inspection & Enforcement
United States Nuclear Regulatory Commission

October 27, 1983
Page 2 of 4

Automation Industries - Phoenixville, Pa.
F. L. Clifford Associates - Niantic, Ct.
Gamma Industries - Baton Rouge, La.
Neutron Products - Dickerson, Md.
Tech/Ops Radiation Products Division - Burlington, Ma.
Teledyne Isotopes - Westwood, N. J.

To date, we have received responses only from F. L. Clifford Associates, Gamma Industries, and Teledyne Isotopes. Of these, only Gamma Industries, under Louisiana License Number LA-0006-L01 is specifically authorized to retrieve industrial radiography sources. Teledyne Isotopes has indicated that they do not routinely provide emergency services.

- b) A training module has been issued to all operating radiography centers currently operated by USTC (Reference letter dated August 19, 1983 to Director - - Region I, Attachment 1.) This module has been administered and records of participants are on file.
4. Corrective steps to be taken to avoid violations include follow-up on those potential sources of specialist assistance that have not yet responded, and periodic reinforcement of the training module referenced above.

5. We are now confident that full compliance has been accomplished.

Violation 2

An adequate survey was not performed prior to the attempt to recover a disconnected 47-curie Iridium-192 source in that the position was not located prior to handling the equipment.

1. USTC denies that an adequate survey was not conducted prior to attempting the recovery in that surveys were conducted specifically in accordance with 10 CFR 20.201(b) (2) "are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present". Survey instruments meeting the requirements of 10 CFR 34.24 were employed to confirm that the source was exposed within the confines of the guide tube of the exposure device. Additional measurements, such as triangulation, or successive placement of shielding material, which was available, would have

United States Testing Company, Inc.

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October 27, 1983
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resulted in a greatly increased whole body dose to the specialist employed to conduct the retrieval. A considered judgement was made by the A. I. specialist and USTC personnel in weighing the increased whole body dose versus the possible exposure to the extremity (10 CFR 20.101(a) allows a factor of 15 to 1 in favor of the extremity), and jointly chose the course of action taken.

Violation 3

Prior to June 23, 1983, an evaluation of the radiation dose to the hands of the individual was inadequate in that it did not consider the exposure to the thumb and index finger of an individual who performed the source retrieval on June 10, 1983.

1. USTC denies that there was inadequate evaluation of the radiation dose received. One of the primary reasons that an outside specialist was called in to make the recovery is that USTC did not have in its possession ring badges and other specialized dosimetry equipment required to adequately monitor exposure under special situations such as the recovery operation.

The A. I. specialist conducted an evaluation of his exposure, including development of his regular film badges and ring badges, and with our knowledge and concurrence reported the exposure as required by 10 CFR 20.403(a) (1).

Violation 4

The Radiation Protection Officer was not immediately notified when a source could not be verified to be in a fully shielded position.

Corrective Steps Taken:

- a) As referenced above in response to Violation 1, a training module has been administered to reinforce proper response by radiographers to an emergency of this nature.
- b) As indicated in our letter of August 19, 1983, Attachment II, this revision of our Emergency Procedures is already in place, per Amendment X of the referenced license.

United States Testing Company, Inc.

Office of Inspection & Enforcement
United States Nuclear Regulatory Commission

October 27, 1983
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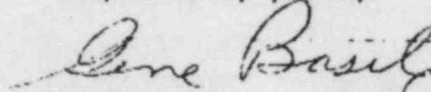
- c) In order to strengthen our field emergency capabilities, we are preparing a revision to our Radiation Safety Procedure which will be incorporated in an upcoming Amendment to establish a dual responsibility:

Administrative Radiation Safety Officer - Carl B. Yoder, P. E.

Emergency Radiation Safety Officer - Joseph Dreibelbis

In summary, USTC acknowledges Violation 1, and submits that full compliance has been achieved. We submit that the violations cited as Violation 1 and Violation 2 are in error, as set forth above. We also request that consideration be given to the accompanying statements submitted in accordance with 10 CFR 2.205.

Respectfully yours,



Gene Basile
Group Vice President

GB:jb

cc: USNRC
Region 1
631 Park Avenue
King of Prussia, Pa. 19406



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

January 10, 1984

Docket No. 30-11579
License No. 37-15445-02
EA 83-81

U.S. Testing Company, Inc.
ATTN: Mr. I. J. Fuchs
Executive Vice President
1415 Park Avenue
Hoboken, New Jersey 07030

Gentlemen:

This refers to your letter dated October 27, 1983 in response to the Notice of Violation and Proposed Imposition of Civil Penalties sent to you with our letter dated October 7, 1983. Our letter and Notice described violations identified during an NRC special safety inspection conducted on June 22 - 23, 1983.

In your response, you deny that violations I.B.1 and I.B.2 occurred, and you request remission of the majority of the proposed civil penalty of \$8,000, indicating that you would offer an amount of \$4,000 in full settlement of this action. After careful consideration of your response, we have concluded for the reasons given in the enclosed Order and Appendix that the violations did occur as stated, and you did not provide a sufficient basis for mitigation of the proposed penalty. Accordingly, we hereby serve the enclosed Order on U.S. Testing Company, Inc., imposing a civil penalty in the amount of Eight Thousand Dollars.

We note further that an \$8,000 civil penalty could have been proposed for Violation I.A alone since it is an exposure in excess of ten times the regulatory limit. In this case, however, the civil penalty was assessed equally among all violations associated with the event so that emphasis is also placed on the cause of the event, and the actions taken in response to it.

Your response does not provide a description of the corrective actions taken to prevent recurrence of violations I.B.1 and I.B.2. In your response to the enclosed Order, please provide a description of those actions.

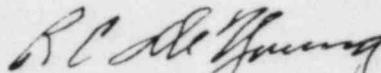
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

U.S. Testing Company, Inc.

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,



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosures:

1. Order Imposing Civil Monetary Penalties
2. Appendix - Evaluations and Conclusion

cc:

Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
Commonwealth of Pennsylvania
State of New Jersey

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of)

U.S. TESTING COMPANY, INC.)
1415 Park Avenue)
Hoboken, New Jersey 07030)

Docket No. 30-11579
License No. 37-15445-02
EA 83-81

ORDER IMPOSING MONETARY PENALTIES

I

United States Testing Company, Inc., 1415 Park Avenue, Hoboken, New Jersey, 07030 (the "licensee") is the holder of License No. 37-15445-02 (the "license") issued by the Nuclear Regulatory Commission (the "NRC") which authorizes the licensee to possess and use radioactive materials in accordance with conditions specified therein.

II

An NRC special safety inspection of the licensee's activities under the license was conducted on June 22 - 23, 1983. As a result of 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 October 7, 1983. The Notice states the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of cumulative civil penalties. A response dated October 27, 1983 to the Notice of Violation and Proposed Imposition of Civil Penalties was received from the licensee.

III

Upon consideration of the answers received, the statements of fact, explanations and arguments for remission or mitigation of the proposed civil penalties contained therein, and as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined 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 (42 U.S.C. 2282, PL 96-295), and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

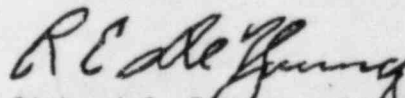
The licensee pay civil penalties in the amount of Eight Thousand Dollars (\$8,000) within thirty days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

The licensee may, within thirty days of the date of this Order, request a hearing. A request for a hearing shall be addressed to the Director, Office of Inspection and Enforcement. A copy of the hearing request shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555. If a hearing is requested, the Commission will issue an Order designating the time and place of hearing. Upon failure of the licensee to request a hearing within thirty days of the date of this Order, the provisions of this Order shall be effective without further proceedings and, if payment has not been made by that time, the matter may be referred to the Attorney General of the United States 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 violated NRC requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties; and
- (b) whether, on the basis of such violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 10 day of January 1984

APPENDIX

EVALUATIONS AND CONCLUSIONS

For each violation and associated civil penalty identified in Section I of the NRC's Notice of Violation and Proposed Imposition of Civil Penalties dated October 7, 1983, the original violation and the licensee's response are stated and the NRC's evaluations and conclusions regarding the licensee's response are presented. The licensee's response was provided in two letters dated October 27, 1983 from Mr. Gene Basile, Group Vice President, U.S. Testing Company, Inc., to the Director, Office of Inspection and Enforcement. The NRC staff's evaluations and conclusions take into consideration the October 27, 1983 letters which constituted the licensee's response to the Notice of Violation and Proposed Imposition of Civil Penalties.

Item I.A

Statement of Violation

10 CFR 20.101(a) prohibits the use of licensed material in such a manner as to cause any individual in a restricted area to receive in any calendar quarter from radioactive materials or other sources of radiation a total occupational radiation dose in excess of 18.75 rem to the hands.

Contrary to the above,

During the second calendar quarter of 1983, specifically on June 10, 1983, an employee of Automation Industries, Inc., acting as a consultant for U.S. Testing Company, Inc., while attempting to retrieve a 47-curie iridium-192 source that had disconnected from a U.S. Testing Company, Inc. radiography device, received a radiation exposure to the index finger and thumb of one of his hands calculated to be between 650 and 1100 rem.

Licensee's Response

The licensee does not deny that this exposure took place but submits that the regulations are unclear with respect to the responsibility of the licensee for exposure to a "worker" performing an emergency retrieval of a disconnected source. The licensee indicates that the requirements of 10 CFR Part 20 establish limits for the exposure of "individuals" to licensed materials under the control of the licensee. The licensee further states that the exposure being cited occurred to an employee of an organization independently licensed by the NRC which has been publicly offering this emergency retrieval service for many years.

The licensee submits that the regulations as they presently exist cover the use of licensed materials under normal conditions, and do not adequately cover emergency conditions, such as a disconnected sealed source, and therefore requests remission of at least a portion of the civil penalty proposed for this violation.

NRC's Evaluation of Licensee's Response

At the time that the overexposure occurred, U.S. Testing Company (USTC) was responsible for activities involving radioactive byproduct material which it held pursuant to its NRC license. USTC did not transfer possession or ownership of the byproduct material that caused the overexposure to the Automation Industries (AI) employee, and it could not have transferred the material lawfully to AI, because AI would not have been authorized to receive the material at the site of the retrieval effort. USTC chose to contract for the services of AI to assist in the source retrieval. Under the circumstances, USTC was responsible under its license for assuring that all activities, both routine and emergency, conducted by its employees and consultants conformed to NRC regulations and applicable license conditions. USTC is responsible for the violations.

Although the USTC characterizes the source retrieval as an "emergency" operation, the circumstances did not warrant a departure from sound radiation safety practices. In addition, inadequate control of an emergency operation is not a sufficient basis for concluding that no enforcement action is appropriate for the violations associated with the source retrieval. NRC requirements in 10 CFR Part 20 require a prudent assessment of radiation hazards, in both routine or in emergency situations, and prevention of unnecessary overexposures. Under the circumstances here, a reasonable survey would have prevented the overexposure that occurred.

NRC's Conclusion

The violation did occur as originally stated. The information in the licensee's response does not provide a basis for remission of any portion of this civil penalty.

Item I.B.1

Statement of Violation

10 CFR 20.201(b) requires that each licensee make such surveys as (1) are necessary to comply with regulations in 10 CFR 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 radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above,

1. On June 10, 1983, an adequate survey was not performed prior to the attempt to recover a disconnected 47-curie iridium-192 source from its radiography device, in that the position of the source was not located prior to handling the equipment.

Licensee's Response

The licensee denies that an inadequate survey was conducted, but acknowledges that the specific location of the source within the guide tube was not determined. The licensee maintains that determination of a specific location of the disconnection within the guide tube would have required repeated approaches to the exposed source, applying the available lead shielding, and making an additional survey. The licensee contends that this prolonged activity would have resulted in a much greater whole body exposure than the 185 mrem that was recorded on the film badge worn by the consultant employee.

The licensee further indicates that the requirements of 10 CFR 20.101(a) apply a weighting factor of 15 to 1 in allowable exposure of extremities versus whole body exposure, and they contend that the joint decision of the consultant employee and the licensee personnel to proceed with the recovery of the source was the most prudent action, rather than a violation. The licensee requests remission of all of the civil penalty proposed for this violation.

NRC's Evaluation of Licensee's Response

The NRC staff maintains that an adequate survey was not performed prior to the act of disconnecting the source guide tube by turning the connector nut by hand because the location of the source had not been determined prior to turning the connector nut by hand which caused the exposure in excess of regulatory limits. Once it was decided to disconnect the connector nut by hand, a reasonable survey would include determination of the location of the source within the guide tube to assess the radiation hazards incident to turning the connector nut. Such a survey would not have required a substantial additional whole body exposure. Had the location of the source been determined by a reasonable survey, the retrieval could have been performed in a manner that would not have resulted in the overexposure.

NRC's Conclusion

The violation did occur as stated. The information provided in the licensee's response does not provide an adequate basis for mitigation of the civil penalty for this violation.

Item I.B.2

Statement of Violation

10 CFR 20.201(b) requires that each licensee make such surveys as (1) are necessary to comply with regulations in 10 CFR 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 radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above,

2. Prior to June 23, 1983, an evaluation made of the radiation dose to the hands of the individual was inadequate in that it did not consider the exposure to the thumb and index finger of an individual who performed the source retrieval on June 10, 1983.

Licensee's Response

The licensee denies that a violation occurred and requests remission of all of the civil penalty for this violation. The licensee indicates that the services of the consultant were obtained for the source retrieval because the licensee does not possess the ring badges and other specialized personal dosimetry devices to monitor exposure under emergency conditions. The licensee further indicates that immediately following the exposure, the consultant specialist conducted an evaluation of his exposure, had his whole body and ring badges developed, and made prompt and timely notification to the NRC with the licensee's knowledge and concurrence, thus satisfying the requirements of 10 CFR 20.405(a)(1).

NRC's Evaluation of Licensee's Response

A violation did occur because neither the licensee nor the consultant evaluated the dose to the portion of the consultant's hand which was in direct contact with the source guide tube connector nut during the disassembly of the guide tube from the radiographic exposure device. During the inspection, the licensee's representatives admitted that they had not performed such an evaluation. Although extremity ring dosimeters were worn by the consultant, and, when processed, indicated a total exposure of 59,170 mrem to the left hand and 12,000 mrem to the right hand, the ring dosimeters did not represent the dose to the portion of the consultant's hand that was in direct contact with the source guide tube connector nut during disassembly of the guide tube from the radiographic exposure device. As discussed in the staff's evaluation of the licensee's response to Item I.A, USTC was responsible, as the licensee of the material causing the overexposure, for ensuring that an appropriate evaluation of the exposure was made. While USTC could appropriately direct a consultant to perform the exposure evaluation, USTC cannot transfer the responsibility under its license for assuring that proper evaluations are performed.

NRC's Conclusion

The violation did occur as originally stated. The information provided in the response does not provide an adequate basis for mitigation of the civil penalty for this violation.

II.B. MATERIAL LICENSEES, SEVERITY LEVEL III VIOLATIONS,
NO CIVIL PENALTY

Docket No. 30-0291
License No. 35-11420-01
EA 84-4

2-9-84

C. William Simcoe, M.D.
Utica Square Medical Center, Suite 110
Tulsa, OK 74114

Dear Dr. Simcoe:

This refers to the routine, unannounced radiation safety inspection conducted by Mr. R. C. Brown of this office on October 31, 1983, of the activities authorized by NRC Byproduct Material License 35-11420-01 and to the discussion of our findings held by the inspector with members of your staff at the conclusion of the inspection. The enclosed NRC Inspection Report 30-0291/83-02 documents the Enforcement Conference held on December 15, 1983, by telephone, with Mr. R. E. Hall and other members of the Region IV staff with you and Mr. Michael Brotherton of your staff.

The inspection was an examination of the activities conducted under the license as they relate to radiation safety and to compliance with the Commission's rules and regulations, and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews of personnel, independent measurements, and observations by the inspector.

During this inspection certain of your activities were found not to be conducted in full compliance with NRC requirements. Item 1 described in the attached Notice of Violation, involving an unauthorized user of radioactive material, is classified as a Severity Level III violation in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C). Normally, a civil penalty is proposed for Severity Level III violations. However, we have exercised our discretion, after our discussion with you during the Enforcement Conference and after consultation with the Director of the Office of Inspection and Enforcement, and have decided not to propose a civil penalty in this case. In making this decision, we have taken into consideration the fact that the unauthorized user was a physician technically qualified to use the strontium-90 eye applicator and that you took prompt corrective action after being informed of the violation. Nonetheless, we wish to emphasize that similar violations in the future may result in escalated enforcement action.

Mr. Brown also reviewed the actions you had taken with respect to two violations observed during our previous inspection which was conducted October 26, 1976. It was observed that these two violations had recurred during the period of inspection. These recurring violations and the pertinent requirements are listed as Items 2 and 4 of the enclosed Notice of Violation.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you believe to be exempt from disclosure under 10 CFR 9.5(a)(4), it is necessary that you (a) notify this office by telephone within 10 days from the date of this letter of your intention to file a request for withholding; and (b) submit within 25 days from the date of this letter a written application to this office to withhold such information. If your receipt of this letter has been delayed such that less than 7 days are available for your review, please notify this office promptly so that a new due date may be established. Consistent with Section 2.790(b)(1), any such application must be accompanied by an affidavit executed by the owner of the information which identifies the document or part sought to be withheld, and which contains a full statement of the reasons why you claim that the information should be withheld from public disclosure. This section further requires the statement to address with specificity the considerations listed in 10 CFR 2.790(b)(4). The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified periods noted above, the report will be placed in the Public Document Room.

You are required to respond to these matters, in writing, in accordance with the provisions of Section 2.201 of the NRC "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Your response should be based on the specifics contained in the Notice of Violation attached to this letter.

The response directed by this letter and accompanying Notice is 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.

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

Sincerely,

Original Signed by:

PAUL S. CHECK

John T. Collins

Regional Administrator

Enclosure:

Appendix A - Notice of Violation

Appendix B - Inspection

Report 30-0291/83-02

APPENDIX A

NOTICE OF VIOLATION

C. William Simcoe, M.D.
Utica Square Medical Center
Tulsa, Oklahoma

Docket No. 30-0291
License No. 35-11420-01
EA 84-4

Based on the results of the inspection conducted on October 31, 1983, and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C), 47 FR 9987 (March 9, 1982), the following violations were identified:

1. License Condition 12 restricts the use of licensed material to C. William Simcoe, M.D.

Contrary to this requirement, licensed material was used by James Kraft, M.D., during the period September 1981 to September 1983.

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

2. License Condition 14 states that each sealed source containing licensed material with a half-life greater than 30 days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed 6 months.

Contrary to this requirement, a strontium-90 eye applicator, S/N ARC-B1-179, was not leak tested during the period November 1981 to November 1983.

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

3. License Condition 10 states that licensed material shall be used at Utica Square Medical Center, Suite 110, Tulsa, Oklahoma.

Contrary to this requirement, licensed material was used intermittently at 4720 South Harvard, Tulsa, Oklahoma, during the period November 1981 to September 1983.

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

4. 10 CFR 19.11 states, in part, that each licensee shall post current copies of the following documents: (1) the regulations in this part and in Part 20 of this chapter, (2) the license, license conditions, or documents incorporated into a license and a Form NRC-3.

Contrary to this requirement, the licensee had not posted any notices to workers.

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

Notice of Violation

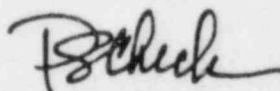
-2-

Pursuant to the provisions of 10 CFR 2.201, C. William Simcoe, M.D., is hereby required to submit to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including:

- (1) the corrective steps which have been taken and the results achieved;
- (2) the corrective steps which will be taken to avoid further violations; and
- (3) the date when full compliance will be achieved.

Consideration may be given to extending your response time for good cause shown.

FOR THE NUCLEAR REGULATORY COMMISSION



for John T. Collins
Regional Administrator

Dated at Arlington, Texas
this 9 day of February 1984

U.S. GOVERNMENT PRINTING OFFICE: 1984-421-297:3911

BIBLIOGRAPHIC DATA SHEET

NUREG-0940
Vol. 3, No. 1

SEE INSTRUCTIONS ON THE REVERSE

2. TITLE AND SUBTITLE

Enforcement Actions: Significant Actions Resolved
Quarterly Progress Report
(January - March 1984)

3. LEAVE BLANK

4. DATE REPORT COMPLETED

MONTH

YEAR

April

1984

6. DATE REPORT ISSUED

MONTH

YEAR

April

1984

5. AUTHOR(S)

IE Enforcement Staff

7. PERFORMING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)

Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

8. PROJECT/TASK/WORK UNIT NUMBER

9. FIN OR GRANT NUMBER

10. SPONSORING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)

Same as 7 above.

11a. TYPE OF REPORT

Technical

b. PERIOD COVERED (Inclusive dates)

January - March 1984

12. SUPPLEMENTARY NOTES

13. ABSTRACT (200 words or less)

This compilation summarizes significant enforcement actions that have been resolved during one quarterly period (January - March) 1984 and includes copies of letters, notices, and orders sent by the Nuclear Regulatory Commission to licensees with respect to these enforcement actions and the licensees' responses. It is anticipated that the information in this publication will be widely disseminated to managers and employees engaged in activities licensed by the NRC, in the interest of promoting public health and safety as well as common defense and security.

14. DOCUMENT ANALYSIS - a. KEYWORDS/DESCRIPTORS

enforcement actions resolved

b. IDENTIFIERS/OPEN-ENDED TERMS

15. AVAILABILITY STATEMENT

Unlimited

16. SECURITY CLASSIFICATION

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(This report)

Unclassified

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