NUREG-0940
Vol. 4, No. 4

Enforcement Actions: Significant Actions Resolved

Quarterly Progress Report
October - December 1985

U.S. Nuclear Regulatory Commission

Office of Inspection and Enforcement

IE Enforcement Staff

NOTICE

Availability of Reference Materials Cited in NRC Publications

Most documents cited in NRC publications will be available from one of the following sources:

1. The NRC Public Document Room, 1717 H Street, N.W.
   Washington, DC 20555
2. The Superintendent of Documents, U.S. Government Printing Office, Post Office Box 37082,
   Washington, DC 20013-7082
3. The National Technical Information Service, Springfield, VA 22161

Although the listing that follows represents the majority of documents cited in NRC publications, it is not intended to be exhaustive.

Referenced documents available for inspection and copying for a fee from the NRC Public Document Room include NRC correspondence and internal NRC memoranda; NRC Office of Inspection and Enforcement bulletins, circulars, information notices, inspection and investigation notices; Licensee Event Reports; vendor reports and correspondence; Commission papers; and applicant and licensee documents and correspondence.

The following documents in the NUREG series are available for purchase from the GPO Sales Program: formal NRC staff and contractor reports, NRC-sponsored conference proceedings, and NRC booklets and brochures. Also available are Regulatory Guides, NRC regulations in the *Code of Federal Regulations*, and *Nuclear Regulatory Commission issuances*.

Documents available from the National Technical Information Service include NUREG series reports and technical reports prepared by other federal agencies and reports prepared by the Atomic Energy Commission, forerunner agency to the Nuclear Regulatory Commission.

Documents available from public and special technical libraries include all open literature items, such as books, journal and periodical articles, and transactions. *Federal Register* notices, federal and state legislation, and congressional reports can usually be obtained from these libraries.

Documents such as theses, dissertations, foreign reports and translations, and non-NRC conference proceedings are available for purchase from the organization sponsoring the publication cited.

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Copies of industry codes and standards used in a substantive manner in the NRC regulatory process are maintained at the NRC Library, 7920 Norfolk Avenue, Bethesda, Maryland, and are available there for reference use by the public. Codes and standards are usually copyrighted and may be purchased from the originating organization or, if they are American National Standards, from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

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Manuscript Completed: December 1985
Date Published: February 1986

IE Enforcement Staff

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

ABSTRACT

This compilation summarizes significant enforcement actions that have been resolved during one quarterly period (October - December 1985) 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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October - December 1985

INTRODUCTION

This issue of NUREG-0940 is being published to inform NRC licensees about significant enforcement actions and their resolution for the fourth quarter of 1985. 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 fourth quarter of 1985 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 NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985). Violations are categorized in terms of five levels of severity to show their relative importance within each of the following activity areas:

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

Part I.A of this report 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. 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 also are included in Parts I.A and II.A.

Actions still pending on December 31, 1985 will be included in future issues of this publication when they have been resolved.

SUMMARIES

I. REACTOR LICENSEES

A. Civil Penalties and Orders

Arizona Public Service Company, Phoenix, Arizona
(Palo Verde Nuclear Generating Station, Unit 1) EA 85-87, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $50,000 was issued on October 8, 1985 based on a violation involving the post-accident sampling system. The violation appears to have been the direct result of a decision to relocate a post-accident sample point without an evaluation to show that specific requirements were met. The licensee responded and paid the civil penalty on November 7, 1985.

Baltimore Gas and Electric Company, Baltimore, Maryland
(Calvert Cliffs Nuclear Power Plant, Units 1 and 2) EA 85-102, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $50,000 was issued September 26, 1985 based on the licensee's failure to implement and maintain the installed upgraded post-accident sampling system. The licensee responded and paid the civil penalties on November 7, 1985.

Commonwealth Edison Company, Chicago, Illinois
(LaSalle Nuclear Power Station, Units 1 and 2) EA 85-95, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $125,000 was issued on September 27, 1985 based on violations where the licensee failed to ensure that modifications performed on the emergency core cooling system (ECCS) actuation instrumentation systems were adequately controlled so that the operability of the ECCS systems was not jeopardized. The base penalty was escalated by 150 percent because of multiple examples of the particular violations and the licensee's prior poor performance in the area of concern. The licensee responded and paid the civil penalties on November 26, 1985.

Commonwealth Edison Company, Chicago, Illinois
(LaSalle Nuclear Power Station, Units 1 and 2) EA 85-114, Supplement III

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $37,500 was issued November 8, 1985 based on a violation involving the failure to maintain adequate control over the security badge system. The base violation was reduced by 25 percent because of the licensee's prompt corrective actions which included (1) an extensive effort to recover all improperly discarded badges, (2) posting a security officer at the ingress turnstile to assure proper usage

of cards, (3) revising the procedure for badge issuance and disposal, and (4) issuing directives to all CECo's nuclear stations concerning badge disposal. The licensee responded and paid the civil penalty on December 2, 1985.

GPU Nuclear Corporation, Parsippany, New Jersey
(Three Mile Island, Units 1 and 2) EA 82-124, Supplement VII

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $140,000 was issued on July 22, 1983 based on violations involving the submittal by the licensee of material false statements and on a violation related to deficiencies in the implementation of the licensee's operator requalification program. The investigation report was referred to the Department of Justice. The licensee asked for an extension of time until the investigation report could be released to respond. Notwithstanding the requested delay in responding to the Notice, the licensee paid $40,000 of the penalties on August 2, 1984 and restated its intention to provide a response within 30 days of the receipt of the investigation report. The Department of Justice completed its review of the case and the report was provided to the licensee on February 1, 1985. The licensee responded in three separate letters on April 15, 1985 and paid the remaining $100,000, but asked for mitigation. After careful consideration of the licensee's response, the request for mitigation was denied in a letter dated October 21, 1985.

Indiana and Michigan Electric Company, Columbus, Ohio
(Donald C. Cook Plant, Units 1 and 2) EA 85-94, Supplement III

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $100,000 was issued on September 25, 1985 based on multiple examples of failure to maintain control over access to vital areas and on a reporting violation. The licensee responded and paid the civil penalties on October 25, 1985.

Sacramento Municipal Utility District, Sacramento, California
(Rancho Seco Nuclear Generating Station) EA 85-103, Supplement I

A Notice of Violation and Proposed Imposition of a Civil Penalty in the amount of $50,000 was issued on September 26, 1985 based on violations of 10 CFR Part 50, Appendix B, relating to seismic supports for the nitrogen supply and vent header system which connects to the reactor coolant system vent. The lack of adequate supports resulted in a 17 gpm nonisolable primary coolant leak on June 23, 1985. The licensee responded and paid the civil penalty on October 25, 1985.

B. Severity Level III Violations, No Civil Penalty

Georgia Power Company, Atlanta, Georgia
(Vogtle Electric Generating Plant) EA 85-117, Supplement II

A Notice of Violation was issued November 15, 1985 based on a violation of 10 CFR Part 50, Appendix B. An investigation indicated that a Pullman Power Products Company manager at Vogtle had intimidated

quality control personnel who reported to him administratively. A civil penalty was not proposed because of the licensee's thorough investigation and prompt corrective actions to resolve this matter. The corrective actions included the replacement of the manager charged with intimidation, implementing methods for quality control inspectors to express their concerns, and improved training for quality control and other personnel.

Kansas Gas and Electric Company, Wichita, Kansas
(Wolf Creek Generating Station) EA 85-127, Supplement I

A Notice of Violation was issued on December 18, 1985 based on a violation that involved the failure to adhere to technical specification requirements regarding operability of the centrifugal charging pumps. Several Severity Level IV violations were also identified. A civil penalty was not proposed because the licensee promptly identified and reported the violation and unusually prompt and extensive corrective action was taken to prevent recurrence.

Vermont Yankee Nuclear Power Corporation, Brattleboro, Vermont
(Vermont Yankee Nuclear Power Station) EA 85-119, Supplement III

A Notice of Violation was issued on November 15, 1985 based on a violation involving the undetected and unauthorized entry of a contractor employee into the site protected area. A civil penalty was not proposed because (1) the violation was discovered by another contractor employee who promptly reported to the NRC, (2) the licensee had prior good enforcement history in the security area, and (3) the licensee took prompt and extensive corrective actions, including the establishment of a task force to assess guard functions, implementing procedures, and the overall effectiveness of the security program.

Virginia Electric and Power Company, Richmond, Virginia
(Surry Power Station, Units 1 and 2) EA 85-123, Supplement III

A Notice of Violation was issued on November 21, 1985 based on a violation involving a licensee employee, who had previously been granted unescorted access to the protected area and vital areas, entering the protected area through an open vehicle gate without being searched and without being issued a security photo identification badge. A civil penalty was not proposed because of the licensee's identification and prompt reporting and prior good performance in the area of concern.

II. MATERIALS LICENSEES

A. Civil Penalties and Orders

American Can Company, Greenwich, Connecticut
EA 85-47, Supplement VI

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $500 was issued May 10, 1985 based on violations involving the unauthorized removal of licensed material and testing

and installation of licensed material by unlicensed personnel. The licensee responded on June 24, 1985. After considering the response, the penalty for one violation was withdrawn and an Order mitigating the civil penalty to $250 was issued November 4, 1985. The licensee responded and paid the civil penalty on December 3, 1985.

E. L. Conwell & Company, Bridgeport, Pennsylvania
EA 85-130, Supplements IV and V

A Notice of Violation and Proposed Imposition of Civil Penalty was issued December 10, 1985 based on violations including (1) possession of licensed material at unauthorized locations, (2) failure to secure licensed material in an unrestricted area, (3) failure to adhere to Department of Transportation requirements, (4) failure to leak test sealed sources as required, and (5) failure to conduct a physical inventory every six months. The licensee paid the civil penalty on December 31, 1985 and responded to the Notice on January 8, 1986.

Gorsira X-Ray, Inc., Farmington Hills, Michigan
EA 85-02

An Order to Show Cause and Order Suspending License (Effective Immediately) was issued January 15, 1985 based on violations involving (1) byproduct material being stored at locations not authorized by the license, (2) a survey meter that was not calibrated at required intervals being used by the licensee during radiographic operations, and (3) sealed radiography sources not, in all cases, being leak tested at required intervals. The licensee did not respond to the Order to Show Cause and Order Suspending License. On April 2, 1985 an Order Revoking License was issued.

John C. Haynes Company, Newark, Ohio
EA 85-40

An Order which required the licensee to permit entry and removal of radioactive material and contamination by a person or agency authorized by the Commission was issued April 5, 1985 based on (1) violations involving the unauthorized use of licensed material, (2) the extensive contamination of the licensee's facility, and (3) the absence of a responsible individual to ensure that the facility is safely maintained. An Order Prohibiting Access to Controlled Areas was issued on May 10, 1985. A letter dated August 26, 1985 advised the licensee that decontamination activities were concluded on July 26, 1985. The license was terminated on August 19, 1985.

Met-Chem Engineering Laboratories, Salt Lake City, Utah
EA 85-92, Supplements IV, V, and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $5,000 was issued on October 8, 1985 based on violations which included the use of an unauthorized and unqualified

individual to perform radiography, failure to conduct an adequate evaluation of a radiation exposure, and failure to maintain records showing results of surveys. The licensee responded on November 5, 1985 asking for mitigation. A second letter was received November 20, 1985 and the licensee paid the civil penalties on November 22, 1985.

Met Lab, Inc., Hampton, Virginia
EA 85-04

An Order to Show Cause Why License Should Not be Revoked was issued May 15, 1985 based on a special inspection and an Office of Investigations inquiry invo ving the falsification of records. The licensee responded on June 8, 1985 and an Order Modifying License was issued on October 16, 1985.

Metro Health Center, Erie, Pennsylvania
EA 85-98, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $3,750 was issued n September 16, 1985 based on violations involving (1) licensed material being stored in an unrestricted area, (2) failure to repair or adjust the dose calibrator, (3) failure to calibrate survey meters, (4) failure to conduct weekly meter surveys, (5) failure to measure external radiation levels on packages containing radioactive material, and (6) failure to monitor radioactive trash prior to disposal in the normal trash. The licensee responded in two letters dated October 10, 1985. After considering the licensee's responses, an Order Imposing a Civil Monetary Penalty was issued November 14, 1985. The licensee paid the civil penalty on December 6, 1985.

Nuclear Fuel Services, Inc., Rockville, Maryland
EA 84-128, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $20,000 and an Order Modifying License were issued February 21, 1985 based on violations involving the accumulation above specified action limits of uranium-bearing solids in process equipment and failure to make appropriate investigations and take corrective actions. The licensee responded in two letters dated May 22, 1985. After careful consideration of the responses, the base penalty was reduced by 25 percent. An Order Imposing Civil Monetary Penalties for $15,000 was issued on November 27, 1985. The licensee paid the penalties on December 30, 1985.

Princeton University, Princeton, New Jersey
EA 85-70, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $4,000 was issued July 3, 1985 based on several violations leading to an individual receiving a skin exposure of 38 rems. The licensee responded on July 29, 1985 and after consideration of the

licensee's response, a 50 percent reduction of the base penalty was made. An Order Imposing Civil Monetary Penalties for $2,000 was issued on October 10, 1985. The licensee paid the civil penalties on October 30, 1985.

Quality Assurance Testing, LaFox, Illinois
EA 85-116, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $500 was issued November 7, 1985 based on violations involving (1) licensed material being used by personnel who had not completed the device manufacturer's training program, (2) failure to use film badges or other dosimetry devices, and (3) failure to leak test two moisture density gauges at the required time. The licensee responded and paid the civil penalties on December 4, 1985.

Veterans Administration Medical Center, Bronx, New York
EA 84-98, Supplements IV and VI

An Order Modifying License and Notice of Violation was issued March 5, 1985 based on violations involving an overexposure to iodine-125 in an amount 554 times the limit specified in the regulations and the failure of an individual working with licensed material to wear gloves as required. The licensee submitted a proposal for conducting audits as required in the Order on November 8, 1985.

Veterans Administration Medical Center, Washington, DC
EA 85-31, Supplements IV and VI

An Order Modifying License and Notice of Violation was issued March 27, 1985 based on violations involving (1) disposal of radioactive material in an unlicensed landfill, (2) licensed material in an unrestricted area, and (3) failure to follow NRC guidelines for radiation safety. The licensee responded on May 20, 1985 and August 2, 1985 with a report on corrective actions as required by the Order.

B. Severity Level III Violations, No Civil Penalty

Boston University, Boston, Massachusetts
EA 85-136, Supplements IV and VI

A Notice of Violation was issued December 31, 1985 based on violations involving (1) licensed material stored in an unrestricted area, (2) licensed material being used by unauthorized individuals, (3) licensed material being used in unauthorized applications, and (4) records not being kept of monthly disposals. A civil penalty was not proposed because of the licensee's unusually prompt and extensive corrective actions and the licensee's previous good enforcement history.

Presbyterian-University of Pennsylvania Medical Center, Philadelphia, Pennsylvania
EA 85-132, Supplements IV and VI

A Notice of Violation was issued December 20, 1985 based on violations involving (1) licensed material stored in an unauthorized area, (2) unauthorized individuals using licensed material without the supervision of the physician named on the license, and (3) failure to train individuals regarding the license requirements. A civil penalty was not proposed because of the licensee's prompt and extensive corrective actions and the licensee's previous good enforcement history.

I.A. REACTOR LICENSEES, CIVIL PENALTIES AND ORDERS

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

Docket No. 50-528
License No. NPF-41
EA 85-87

OCT 08 1985

Arizona Public Service Company
P. O. Box 52034
Phoenix, Arizona 85072-2034

Attention: Mr. E. E. Van Brunt, Jr.
Executive Vice President

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT NO. 50-528/85-22)

This refers to the inspection conducted on June 24 through July 12, 1985 and July 23-24, 1985 and subsequent telephone conversations on July 25-31, 1985 of activities authorized by NRC License No. NPF-41. A report of the results of the inspection was forwarded to you on August 2, 1985 (Report No. 50-528/85-22). During the inspection the NRC identified an apparent violation involving the Post Accident Sampling System (PASS). The selected location for obtaining post accident containment atmosphere samples was found to be unacceptable because projected high radiation exposure rates in the area under post accident conditions could have resulted in individuals collecting the sample exceeding the dose criteria of General Design Criterion (GDC)-19.

The results of this inspection were discussed by Mr. C. I. Sherman of this office with Mr. J. G. Haynes and other members of your staff on July 12, 1985, and by Messrs J. L. Crews, A. D. Johnson, and G. P. Yuhas with Mr. Haynes and other members of your staff on July 24, 1984. In addition, the circumstances associated with the violation identified during the inspection were discussed at an enforcement conference on August 8, 1985 held at the NRC Region V office between Mr. E. E. Van Brunt, Jr. and other members of your staff and Mr. John B. Martin and other members of the NRC staff.

We are concerned that the violation appears to have been the direct result of a decision to relocate a post accident sample point without an evaluation to show that specific requirements were met. The violation also appears to be the result of a management failure to establish a system to assure that this type of work is appropriately performed, reviewed, and documented. This represents, in our view, a significant concern regarding the adequacy of work undertaken by your staff and contractors. The inspection also identified the need for you to give more attention to procedures and training in the post accident sampling area.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

In addition, we are concerned that as a result of the deficiencies noted above, inaccurate information regarding the operability of the PASS system was submitted to the NRC. We emphasize that failures to adequately control evaluations and reviews of changes made to required systems can result in violations involving the reporting of inaccurate information to the NRC.

To emphasize the importance NRC places on post accident and other monitoring activities and on the need for licensees to maintain proper control over radiation protection, chemistry activities, and the evaluation of system changes, 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 Fifty Thousand Dollars ($50,000) for the violation described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the violation described in the enclosed Notice has been categorized as a Severity Level III. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustment has been deemed appropriate.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should address the corrective actions taken or planned including those actions necessary to ensure that design reviews of changes at the Palo Verde facility are appropriately controlled, documented, and reviewed. After reviewing your response to this Notice, including your proposed corrective actions, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

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

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

Sincerely,

John B. Martin
Regional Administrator

Enclosure:
Notice of Violation and Proposed Imposition of Civil Penalty

Arizona Public Service Company

cc w/enclosure:
J. Bynum, ANPP
S. R. Frost, ANPP
T. D. Shriver, ANPP
W. E. Ide, ANPP
C. N. Russo, ANPP
Jill Morrison, PVIF
Lynne Bernabei, GAP
Duke Railsback, ACC
Arthur C. Gehr, Esq., Snell & Wilmer

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Arizona Public Service Company
Palo Verde Nuclear Generating Station Unit 1
Wintersburg, Arizona

Docket No. 50-528
License No. NPF-41
EA 85-87

During an NRC inspection conducted on June 24 through July 12 and July 23-24, 1985, a violation of NRC requirements involving the operability of the post accident sampling system (PASS) was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to section 234 of the Atomic Energy Act of 1954, as amended, ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205. The particular violation and associated civil penalty is set forth below:

> Technical Specifications 6.8.1.m and 6.8.4.e require, in part, that a program which will ensure the capability to obtain and analyze containment atmosphere samples under accident conditions shall be established, implemented, and maintained prior to operation above 5 percent of full power.
>
> Contrary to the above, from the time the reactor was operated above 5% power on June 6, 1985 until July 5, 1985, a program had not been established which would have ensured the capability to obtain and analyze post-accident containment atmosphere samples in that the selected sample point location, room 127 at the auxiliary building 100 foot elevation (RU-1 monitor), was subject to high radiation levels that in certain accident situations would have severely limited and may have precluded personnel entry. The calculated radiation exposure rates are approximately 260 rem per hour, 3 hours after a major loss of coolant accident with core damage.
>
> This is a Severity Level III Violation (Supplement 1)
> (Civil Penalty - $50,000)

Pursuant to the provisions of 10 CFR 2.201, Arizona Public Service 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 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 that have been taken and the results achieved, (4) the corrective steps which will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Arizona Public Service Company may pay the civil penalty by letter addressed to the Director, Office of Inspection and Enforcement, with a check, draft, or money order payable to the Treasurer of the United States in the amount of Fifty Thousand Dollars ($50,000) or may protest imposition of the civil penalty in whole or in part by a written answer addressed to the Director, Office of Inspection and Enforcement. Should Arizona Public Service 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 Arizona Public Service 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 addressed in Section V.B of 10 CFR Part 2, Appendix C (1985) should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201 but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Arizona Nuclear Power Project'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, 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 8 day of October 1985

Arizona Nuclear Power Project
P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

November 7, 1985
ANPP-33948 WFQ/KLM

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

Subject: Response to Notice of Violation and
Proposed Imposition of Civil Penalty
(NRC Inspection Report No. 50-528/85-22),
dated October 8, 1985
File: 85-070-026

Dear Sir:

Pursuant to the provisions of 10CFR2.201, Arizona Public Service Company hereby submits the response to the Notice of Violation and Proposed Imposition of Civil Penalty, dated October 8, 1985. The response is contained in the Attachment to this letter.

The check of Arizona Public Service Company, holder of License No. NPF-41, in the amount of $50,000, payable to the Treasurer of the United States, is also submitted. This check is in payment of the imposed civil penalty, issued by the NRC on October 8, 1985.

Very truly yours,

EE Van Brunt/DSK

E. E. Van Brunt, Jr.
Executive Vice President
Project Director

EEVB/KLM/dlm
Attachment

cc: J. B. Martin, Region V, NRC
R. P. Zimmerman, NRC
G. W. Knighton, NRC
E. A. Licitra, NRC

ANPP-33948 WFQ/KLM

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

I, Donald B. Karner, represent that I am Assistant Vice President, Nuclear Production of Arizona Nuclear Power Project, that the foregoing document has been signed by me on behalf of Arizona Public Service Company with full authority to do so, that I have read such document and know its contents, and that to the best of my knowledge and belief, the statements made therein are true.

Donald B. Karner

Sworn to before me this 7 day of December, 1985.

Notary Public

My Commission Expires:

April 6, 1987

ATTACHMENT

ARIZONA PUBLIC SERVICE COMPANY (APS)
RESPONSE TO THE NOTICE OF VIOLATION AND
PROPOSED IMPOSITION OF CIVIL PENALTY
DATED OCTOBER 8, 1985

1. APS Admission of Alleged Violation

Although APS believes that at no time during the period of the violation, June 6, 1985 until July 5, 1985, was the public health, safety or interest jeopardized, APS does not contest the violation as stated in the October 8, 1985 Notice of Violation.

2. Reason for Violation

The root cause of this violation was the use of equipment for other than its original design intent without appropriate design review. APS identified two major contributing factors to the root cause, which are a lack of clear task force charter and a lack of adequate compliance/ technical review of the final design and implementation.

3. Corrective Steps Which Have Been Taken and Results Achieved

Modifications to the Palo Verde Nuclear Generating Station (PVNGS) Unit 1 post accident sampling capability as described in ANPP-33238, dated August 19, 1985, have been completed and tested. The PVNGS post accident sampling and analysis procedures have been properly revised and the necessary personnel have been trained on the modified post accident sampling system and related implementing procedures.

These corrective actions have resulted in a modified PVNGS Unit 1 post accident sampling program that satisfies the requirements of NUREG-0737, Item II.B.3 and the successful completion of surveillance testing of the post accident sampling system.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations

APS is taking additional corrective actions beyond those already taken, as described in Section 3, to prevent future incidents of a similar nature. These additional actions include: 1) applying the procedure review process to address changes in design criteria or design intent, 2) applying the procedures for the formal review process for plant changes to changes in design criteria or design intent, 3) formalizing the creation of task forces and requiring a charter describing their responsibility and authority, and 4) implementing a more rigorous and formalized process for review of NRC submittals.

5. Date When Full Compliance Will Be Achieved

Full compliance was achieved on August 19, 1985, as described in ANPP-33238, dated August 19, 1985.

Arizona Nuclear Power Project
P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

Mr. John B. Martin, Regional Administrator
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region V
1450 Maria Lane, Suite 210
Walnut Creek, CA 94596-5368

August 19, 1985
ANPP-33238-EEVB/MAJ

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 1
Docket No. STN-50-528 (License NPF-41)
Post Accident Sampling Program
File: 85-056-026; G.1.01.10; 85-001-762

References: (1) Letter to J. B. Martin, USNRC Region V, from E. E. Van Brunt, ANPP, dated July 26, 1985 (ANPP-33110). Subject: Post Accident Sampling Program
(2) Letter to E. E. Van Brunt, ANPP, from J. B. Martin, USNRC Region V, dated July 29, 1985. Subject: Confirmatory Action Letter-Post Accident Sampling System-PVNGS Unit 1
(3) Letter to G. W. Knighton, NRC, from E. E. Van Brunt, ANPP, dated December 5, 1984 (ANPP-31333). Subject: Schedular Exemption - Post Accident Sampling System

Dear Mr. Martin:

In the Reference (1) letter, we informed you that "PVNGS Unit 1 will not return to Mode 3, per the requirements of Technical Specification 3/4.3.3, until the sampling deficiency is corrected and a post accident sampling system is deemed operable." Additionally, we stated that applicable procedures would be revised and personnel trained once modifications to the post accident sampling program were completed. In response, you provided us with Reference (2).

Since the submittal of Reference (1), the PVNGS post accident sampling program has been modified to obtain the containment air grab sample from a source other than Radiation Monitor RU-1. This modification is depicted in the attached simplified flow diagram. The change involves obtaining the containment atmosphere grab sample directly from a septum located at the remote grab sampler in the Hot Lab Sample Room, 140 Ft. elevation, Auxiliary Building. The containment atmosphere sample is taken directly from the containment utilizing the sample piping common to the Hydrogen Analyzer and Hydrogen Recombiner. Neither the Hydrogen Analyzer or the Hydrogen Recombiner are required to be operated to obtain the containment atmosphere grab sample for post accident analysis

Additionally, APS initiated a Licensing and Technical/Design Verification Review, including an independent verification by Quality Assurance (QA) beyond the normal QA program requirements, to ensure that the requirements of NUREG-0737 Item II.B.3 were met. This review included such areas as procedures, training, testing, dose calculations, licensing requirements, and previous regulatory commitments. The results of this review conclude that the modified post accident sampling program at PVNGS Unit 1 satisfies the requirements of NUREG-0737, Item II.B.3.

Attachment 1 provides for your information, the verified post accident sample analysis capability available at PVNGS. It should be noted that there are differences between the verified analysis capabilities described in Attachment 1 to this letter and the design capabilities in Table B of Reference (3). These differences have been evaluated, and we have determined that our present analytical capability is adequate to meet NUREG-0737 Item II.B.3 and provide pertinent data to the operator, which describes the radiological and chemical status of the reactor coolant system and containment atmosphere. Attachment 1 supercedes Table B of Reference (3).

Modifications to the PVNGS post accident sampling capability, as depicted in the attached diagram, are complete and the analysis capabilities, as described in Attachment 1; have been verified. The PVNGS post accident sampling and analysis procedures have been revised and necessary personnel have been trained on the modified post accident sampling system and the related implementing procedures. The surveillance testing has been completed and the PVNGS Unit 1 post accident program is considered operable, per the requirements of Technical Specifications 3/4.3.3 and 6.8.4(e).

If you have any questions or require further information concerning this subject, please call me.

Very truly yours,

E. E. Van Brunt

E. E. Van Brunt, Jr.
Executive Vice President
Project Director

EEVB/MAJ/slh
Attachment

cc: J. Crews
A. Johnson
G. Yuhas
E. Licitra
M. Ley
R. Zimmerman
A. Gehr

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

SEP 2 6 1985

Docket Nos. 50-317, 50-318
License Nos. DPR-53, DPR-69
EA 85-102

Baltimore Gas and Electric Company
ATTN: Mr. A. E. Lundvall, Jr.
Vice President, Supply
P. O. Box 1475
Baltimore, Maryland 21203

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES (NRC INSPECTION NOS. 50-317/85-16; 50-318/85-14; 50-317/85-18; 50-318/85-16)

This refers to the special NRC team inspections conducted on June 24-28, 1985, and July 15-19, 1985, at the Calvert Cliffs Nuclear Power Plant, Units 1 and 2, to review implementation of certain items related to post-accident sampling and monitoring, as specified in NUREG-0737, "Clarification of TMI Action Plan Requirements." These items were the subject of the NRC "Order Confirming Licensee Commitments on Post-TMI Related Issues," dated March 16, 1983. The reports of these inspections were sent to you on August 8 and 7, 1985, respectively. During the inspections, violations of NRC requirements were identified, one of which involved the failure to implement and maintain the installed upgraded post-accident sampling system (PASS). The PASS was required by the Order to be implemented and maintained beginning June 1, 1983, and the requirement for the PASS to be operable was incorporated into the Technical Specifications on February 22, 1985. The violations, their causes, and your corrective actions were discussed with Mr. J. Tiernan and other members of your staff during a management meeting on July 11, 1985, and at an enforcement conference with you and members of your staff on August 14, 1985. Your actions to address our immediate concerns were confirmed in my letter to you dated August 29, 1985.

The violation involving failure to implement and maintain the PASS is of significant concern to the NRC because (a) the system, although installed, was never fully tested to verify operability, (b) system operating procedures were inadequate, and (c) training of operating personnel was deficient in some areas and nonexistent in others. Further, although it was evident that the PASS system was not being properly maintained because of component failures, such as leaking and inoperable valves, inoperable and inaccurate in-line analyzers, and erroneous control and instrument indicators, correction of these problems was given low priority attention by management.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The failure to aggressively identify and correct deficiencies that existed in the PASS system represents an inadequate level of performance on the part of Baltimore Gas and Electric Company. While the NRC inspection of July 15-19, 1985 did not find similar deficiencies in management oversight with regard to other systems at Calvert Cliffs, the duration of time that the deficiencies in the PASS existed demonstrates the need for improvements in management control and concern for systems that do not affect plant operability directly, but which are required to be maintained operable.

To emphasize the importance of adequate management oversight of such systems, including prompt identification and correction of deficiencies, 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 Fifty Thousand Dollars ($50,000) for the violations described in Section I of the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985) (Enforcement Policy), the violations described in Section I of the enclosed Notice have been categorized as a Severity Level III problem. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustment has been deemed appropriate.

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

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

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

Sincerely,

Thomas E. Murley
Regional Administrator

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalties

cc w/encl:
A. E. Lundvall, Jr., Vice President, Supply
R. M. Douglass, Manager, Quality Assurance
L. B. Russell, Plant Superintendent
Thomas Magette, Administrator, Nuclear Evaluations
R. C. L. Olson, Principal Engineer
R. E. Denton, General Supervisor, Training and Technical Services

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Baltimore Gas and Electric Company
Calvert Cliff Nuclear Power Plant,
Units 1 and 2

Docket Nos. 50-317
50-318
License Nos. DPR-53
DPR-69
EA 85-102

During special NRC inspections conducted on June 24-28, 1985 and July 15-18, 1985, violations of NRC requirements were identified, one of which involved the failure to implement and upgrade a post-accident sampling system. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth in Section I below:

I. VIOLATIONS ASSESSED CIVIL PENALTIES

A. In an "Order Confirming Licensee Commitments on Post TMI Related Issues," dated March 16, 1983, the Nuclear Regulatory Commission ordered the licensee to implement and maintain a post-accident sampling system (PASS), among other specific items, in the manner described in the licensee's submittals noted in Section III of the Order, by dates no later than those specified in the Attachments to the Order. Attachment I of the Order required the installation of an upgraded post-accident sampling capability by June 1, 1983.

Contrary to the above, between June 1, 1983 and February 22, 1985, the upgraded post-accident sampling capability, which is common to both units, although installed, was not functionally implemented nor maintained during this period, in that:

1. the system was never fully tested to verify operability;

2. the accuracy of the in-line analyzers (Boron, ph, dissolved gases and radioisotope) was never demonstrated;

3. valves were not designed for system pressure, often leaked, and at times failed to operate, and in-line analyzers, when operationally tested, were inoperable or provided inaccurate results;

4. modifications to the initial design of the PASS were not reflected in system emergency operating procedures; and

5. personnel responsible for operation of the system in accident conditions were not adequately trained.

B. Technical Specification 3.7.13, "Post-Accident Sampling", was incorporated into licenses for Units 1 and 2 on February 22, 1985, with the issuance of Amendment 99 (Unit 1) and Amendment 81 (Unit 2). The Technical Specification requires the post-accident sampling system to be operable and capable of processing Reactor Coolant System (RCS) samples, from the hot leg and the low pressure safety injection system, and a containment sump sample from the low pressure safety injection system. Further, if the system is not operable, the technical specification requires that within 72 hours, the preplanned alternat method of processing specified samples be initiated, and either: (1) the system is restored to an operable status within 7 days, or (2) a special report to the Commission is submitted outlining the action taken, the cause of inoperability, and plans and schedule for restoring the system to operable status.

Contrary to the above, between March 5, 1985 and June 28, 1985, the post-accident sampling system was inoperable, as reported by the licensee in Special Reports to the Commission dated March 29 and June 6, 1985, but a preplanned alternate method of processing specified samples was not adequately initiated in accordance with the technical specification in that:

1. the alternate method, when tested on three occasions between June 27 and July 18, 1985, did not perform its intended function;

2. no procedure existed for the implementation of the alternate method in the present configuration;

3. personnel were not formally trained in the use of the alternate method; and

4. no evaluation was performed to determine if such operation of the alternate method could be performed within the dose limits of 10 CFR Part 50, Appendix A, General Design Criterion 19.

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

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

II. VIOLATIONS NOT ASSESSED CIVIL PENALTIES

A. Attachment I of the "Order Confirming Licensee Commitments on Post TMI Related Issues," dated March 16, 1983 indicated that the in-containment radiation level monitoring installation was completed at the time the Order was issued.

Contrary to the above, as of June 26, 1985, although the in-containment high radiation monitors were installed in Unit 1, the installation was inadequate in that protective sleeving, required to assure environmental qualifications of the in-containment electrical penetration-to-cable connectors (two for each monitoring device) had not been installed.

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

B. Technical Specification Surveillance Requirement 4.3.3.8, "Radioactive Gaseous Effluent Monitoring Instrumentation", requires that the main vent iodine and particulate sampler shall be demonstrated operable by comparing samples independently drawn from the main vent at least once per month.

Contrary to the above, from February 22, 1985 (the date on which this technical specification became effective) to June 28, 1985, samples were not drawn independently from the main vent at least once per month to verify operability of the main vent iodine and particulate sampler.

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

C. Technical Specification 6.15, "Iodine Monitoring", requires the licensee to implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. Such a program shall include: training of personnel, procedures for monitoring and provision for maintenance of sampling and analysis equipment. Training Instruction No. 5, "Emergency Response Training Program" defines the program for training personnel with respect to monitoring for radioiodine in accident conditions, and specifies yearly training for the personnel involved in this area.

Contrary to the above, the training program for personnel, as defined by Training Instruction No. 5, was not implemented in that the last training to be performed in this area was conducted in February 1984.

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

Pursuant to the provisions of 10 CFR 2.201, Baltimore Gas and Electric 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 I, 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. If an adequate reply is not received within the time specified in this Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 41 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, Baltimore Gas and Electric Company may pay the civil penalties by letter addressed to the Director, Office of Inspection and Enforcement, with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of Fifty Thousand Dollars ($50,000) or may protest imposition of the civil penalties, in whole or in part, by a written answer addressed to the Director, Office of Inspection and Enforcement. Should Baltimore Gas and Electric Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties proposed above. Should Baltimore Gas and Electric 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 the 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 V.B of 10 CFR Part 2, Appendix C (1985) should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201 but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g. citing page and paragraph numbers) to avoid repetition. Baltimore Gas and Electric Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedures for imposing civil penalties.

Upon failure to pay any civil 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

Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 20th day of September 1985

BALTIMORE
GAS AND
ELECTRIC

CHARLES CENTER · P. O. BOX 1475 · BALTIMORE, MARYLAND 21203

ARTHUR E. LUNDVALL, JR.
VICE PRESIDENT
SUPPLY

November 7, 1985

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

ATTENTION: Mr. James M. Taylor, Director

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
Notice of Violation & Proposed Imposition of Civil Penalties
IE Inspection Reports 50-317/85-16; 50-318/85-14 &
50-317/85-18; 50-318/85-16

REFERENCE: (a) Letter from T. E. Murley, NRC, to A. E. Lundvall, Jr., BG&E, dated September 26, 1985, Same Subject

(b) Letter from A. E. Lundvall, Jr., BG&E, to T. E. Murley, NRC, dated October 8, 1985

(c) Letter from A. E. Lundvall, Jr., BG&E, to T. T. Martin, NRC, dated September 26, 1985

Gentlemen:

This letter is being forwarded as requested by reference (a). The subject letter included a proposed imposition of civil penalties of $50,000 for the subject IE Inspection Reports. Please find enclosed Check No. 1900579 from BG&E to the Treasurer of the United States in the amount of $50,000.

Additionally, the responses to the apparent violations addressed in reference (a) are forwarded in the enclosure to this letter.

Should you have any questions regarding this matter, we would be pleased to discuss them with you.

Very truly yours,

for A. E. Lundvall, Jr.
Vice President-Supply

STATE OF MARYLAND :
: TO WIT:
CITY OF BALTIMORE :

Joseph A. Tiernan, being duly sworn states that he is Vice President of the Baltimore Gas and Electric Company, a corporation of the State of Maryland; that he provides the foregoing response for the purposes therein set forth; that the statements made are true and correct to the best of his knowledge, information, and belief; and that he was authorized to provide the response on behalf of said Corporation.

WITNESS my Hand and Notarial Seal: Marilyn R Cox

My Commission Expires: 7/1/86

Enclosure

AEL/LES/gla

cc: D. A. Brune, Esquire
G. F. Trowbridge, Esquire
D. H. Jaffe, NRC
T. E. Murley, NRC
T. Foley, NRC

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14 & 50-317/85-18; 50-318/85-16

SECTION I - ITEM A

We have reviewed the circumstances that led to the apparent violation (i.e., failure to implement and maintain the upgraded Post Accident Sampling System (PASS) capability required by NRC Confirmatory Order dated March 16, 1983). The following concerns were investigated:

NRC ITEMS I.A.1 THROUGH I.A.3

- The system was never fully tested to verify operability.
- The accuracy of the in-line analyzers (boron, pH, dissolved gases and radioiosotope) was never demonstrated.
- Valves were not designed for system pressure, often leaked, and at times failed to operate, and in-line analyzers, when operationally tested, were inoperable or provided inaccurate results.

BG&E RESPONSE TO ITEMS I.A.1 THROUGH I.A.3

The cause of these concerns was a change in operating philosophy between the original installation of the PASS (in 1981 and 1982) and 1984. The system was originally designed and installed as a one-time use system, not as a routine or normal sample method. In 1984, it became apparent that NRC and INPO desired periodic demonstration of PASS operability. Consistent with the original scope, bench testing, and total system integrity post-installation hydrostatic tests, flushes, and necessary valve manipulations were conducted satisfactorily. PASS sample results were not compared with routine sample results because once the system was contaminated, PASS instrumentation maintenance would result in unnecessary man-rem exposure. A dilution verification was considered, but was not necessary since the ported valve transfers a known sample volume (4.7 ml) into the depressurized sample vessel. A simple volume conversion would have confirmed the dilution factor. A sample test matrix was considered; however, was not run through the system because the manufacturer, Combustion Engineering (CE), Incorporated, informed BG&E that a test of another utility's PASS for chemical interferences confirmed CE's results and these applied generically to other CE PASS's. The other maintenance problems occurred beginning in mid-1984, as the system was tested with radioactive coolant samples due to the change in operating philosophy. Since the inspection was completed, many corrective actions have been taken. These corrective actions were forwarded in Enclosure (1) of reference (b), and related to findings 317/85-16-01; 318/85-14-01 through 317/85-16-03; 318/85-14-03.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14 & 50-317/85-18; 50-318/85-16

NRC ITEM I.A.4

o Modifications to the initial design of the PASS were not reflected in system emergency operating procedures.

BG&E RESPONSE TO I.A.4

As was evident in Licensee Event Report 84-03, having two procedures (RCP-1-407 for operation at power and Emergency Response Plan Implementing Procedure (ERPIP) 4.4.7.6 for emergency operating during plant shutdown) provided the opportunity for incorrect usage. The ERPIP did not contain, nor is it appropriate to include precautions for system operation at power in non-emergency conditions. Since the PASS would be operated routinely under non-emergency conditions, it was decided to retain RCP-1-407 as the system operating procedure. The ERPIP was being considered for cancellation, thus RCP-1-407 alone was maintained current with the PASS configuration. ERPIP cancellation or revision was contingent on satisfactory PASS performance so that the differences between pre- and post-accident operation could be identified. In the event of an emergency, RCP-1-407 would have been used for system operation with reference to the ERPIP for radiological considerations. Reference (b), response to finding 317/85-16-03; 318/85-14-03, includes the actions taken to eliminate procedure differences.

NRC ITEM I.A.5

o Personnel responsible for operation of the system in accident conditions were not adequately trained.

BG&E RESPONSE TO I.A.5

Liquid Monitoring Team personnel were trained in classroom and in-plant walk-through sessions on a semi-annual basis. Initial classroom training was held in mid-1983. Classroom and walk-through sessions began in February 1984 and have continued at six month intervals. Actual system operation, including drawing appropriate samples was not accomplished due to system unavailability. However, since June 1985, all members of the Liquid Monitoring Team have been trained on the system, including practice in drawing samples in accordance with current emergency operating procedures. In addition, the instructor for PASS topics was individually trained by the PASS equipment vendor. As procedures have been revised, retraining of team members has been accomplished. In the future, semi-annual training sessions will continue to include changes to either the system design or operating procedures.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14 & 50-317/85-18; 50-318/85-16

NRC ITEM I.B.1

- The alternate method, when tested on three occasions between June 27 and July 18, 1985, did not perform its intended function.

BG&E RESPONSE TO I.B.1

During the three occasions mentioned in the Inspection Reports, various parts of the alternate method did fail due to hardware problems and/or technician errors, which resulted in system failure. The system, however, did perform its function on other occasions both before and after these three instances. This sampling technique represents a proven and viable method of obtaining and analyzing post accident samples.

There has been intensive technician training performed on the sampling method as well as minor modifications to the hardware layout. In addition, a shielded degassing and sampling station will be constructed in the Chemistry Laboratory for this evolution. Piping modifications will be made to return the drains on the NSSS sample sink to the Reactor Coolant Drain Tank. All modifications should be completed by the end of the 1985 Unit 2 refueling outage, currently scheduled to end in December 1985.

NRC ITEM I.B.2

- No procedures existed for the implementation of the alternate method in the present configuration.

BG&E RESPONSE TO I.B.2

The review process for the emergency operating procedure did not facilitate timely revision. Steps taken to correct this deficiency include revising ERPIP 4.4.7.4 to reflect the present system configuration. To avoid further procedural change complications, provisions have been made in ERPIP 5.0 to allow for on-the-spot changes to ERPIPs. The results achieved from these actions are an up-to-date procedure that reflects the existing system configuration. Full compliance is considered to have been achieved September 25, 1985.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14 & 50-317/85-18; 50-318/85-16

NRC ITEM I.B.3

o Personnel were not formally trained in the use of the alternate method.

BG&E RESPONSE TO I.B.3

Emergency PASS operation of alternate sample methods had not been included in earlier Liquid Monitoring Team training sessions due to the absence of a verified and validated emergency procedure as described in the response tc Item I.B.2. However, during August 1985, Liquid Monitoring Team members were trained to obtain liquid samples using both the primary and alternate sampling methods. This training consisted of both walk-through and practical sample-drawing exercises, the latter performed in full anti-contamination clothing. Team members have also been trained on related emergency operating procedure revisions implemented after August.

NRC ITEM I.B.4

o No evaluation was performed to determine if such operation of the alternate method could be performed within the dose limits of 10 CFR 50, Appendix A, General Design Criterion 19.

BG&E RESPONSE TO ITEM I.B.4

The concern was investigated in light of existing NSSS Reactor Coolant Sample (RCS) sink configuration and versions of pertinent ERPIPs used at the time of the inspection. A time and motion study was conducted in 1981 on the interim sampling system (i.e., the NSSS sink while PASS was being designed and installed) which demonstrated compliance with dose limits in 10 CFR 20 per NUREG-0578, of three rem whole body and 18.75 rem for extremities. These limits are more restrictive than the dose limits of 10 CFR 50, Appendix A, General Design Criterion 19.

Since 1981, modifications had been made to the PASS alternate sampling system and associated ERPIPs without any upgraded dose evaluation being performed.

Shortly after the subject inspection, a consultant was contracted to perform an evaluation of the present alternate system configuration against current criterion which pointed out a potential extremity exposure problem. This has been confirmed by BG&E staff engineers. Apparently, system modifications rendered the original dose study invalid. Consequently, the NSSS sink is being modified to include new sampling methods and system/personnel shielding to reduce extremity exposures. A new time and motion study with respect to radiation exposure will be conducted. The expected completion date for these items is December 1985.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14 & 50-317/85-18; 50-318/85-16

NRC ITEM II.A

o As of June 26, 1985, although the in-containment high radiation monitors were installed in Unit 1, the installation was inadequate in that protective sleeving, required to assure environmental qualifications of the in-containment electrical penetration-to-cable connectors (two for each monitoring device) had not been installed.

BG&E RESPONSE TO ITEM II.A

We have investigated this item of apparent noncompliance with NRC requirements. The environmental qualification status of the connectors on the containment high range radiation monitors is consistent with the regulatory requirements in effect at the time each maintenance action was completed on the equipment as stated in reference (b). Accordingly, it is requested that this apparent noncompliance be reconsidered.

NRC ITEM II.B

o From February 22, 1985, (the date on which this Technical Specification became effective) to June 28, 1985, samples were not drawn independently from the main vent at least one per month to verify operability of the main vent iodine and particulate sampler.

BG&E RESPONSE TO II.B

Samples were not drawn independently from the main vent at least once per month to verify operability of the main vent iodine and particulate sampler. The samples were not drawn due to a misinterpretation of the Technical Specification requirements by the responsible organization. To avoid recurrence of this, an independent audit of all future Technical Specification changes will be performed within two weeks of their implementation. This will provide an independent check on all Technical Specification implementation activities. Full compliance with this requirement has been achieved. This item was documented in Licensee Event Report 50-317/85-03.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14 & 50-317/85-18; 50-318/85-16

NRC ITEM II.C

- The training program for personnel, as defined by Training Instruction No. 5, was not implemented in that the last training to be performed in this area was conducted in February 1984.

BG&E RESPONSE TO II.C

Training which satisfies the requirements of Technical Specification 6.15 and Calvert Cliffs Training Instruction 5 was fully documented in February 1984, and at the time of the inspection, was scheduled for August 1985. Partial records exist for Monitoring Team iodine monitoring training in a field exercise in August-September 1984. These records were disallowed by the inspection team, due to the incomplete status of the associated training of monitoring personnel. This does not constitute a violation of training instructions. Emergency response yearly retraining may be scheduled at any time during the calendar year, an example of which is provided in reference (b). It is requested that this apparent noncompliance be reconsidered.

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

September 27, 1985

Docket Nos. 50-373 and 50-374
License Nos. NPF-11 and NPF-18
EA 85-95

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

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC INSPECTION REPORT NOS. 50-373/85023 and 50-374/85018)

This refers to the inspections conducted during the period June 10 - July 24, 1985 of activities authorized by NRC Operating License Nos. NPF-11 and NPF-18 for the LaSalle County Nuclear Power Station, Units 1 and 2. The inspections were conducted after the NRC Resident Inspector was informed on June 10, 1985 that your staff identified that Unit 2 was without Emergency Core Cooling capability for approximately five days and that the plant had been without secondary containment integrity for approximately three days during this same period. This matter was discussed on June 24, 1985 during an Enforcement Conference held at the LaSalle County Nuclear Power Station between Mr. B. L. Thomas and other members of your staff and myself and other members of the NRC staff.

Item I described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty involves loss of the automatic initiation capability of the Emergency Core Cooling System (ECCS) in response to a low-low-low reactor vessel water level signal between June 5-10, 1985 while Unit 2 was in cold shutdown. The violation resulted from the failure of your staff to ensure that modifications performed on safety-related systems were adequately controlled so that system operability was not jeopardized. In addition, from 3:30 a.m. on June 5 until 5:30 p.m. on June 8, 1985, secondary containment was neither established nor maintained as required by the Technical Specifications when Emergency Core Cooling capability is lost. The circumstances leading to the violations are described below.

Division III of the ECCS was removed from service in March 1985 for normal maintenance. Between April and June 1985, due to inadequate controls in the design, inspection, and testing areas, the piping to two reactor vessel water level actuation switches in Division I of the Unit 2 Emergency Core Cooling System (ECCS) was installed backwards and, as a result, the Division I ECCS

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RETURN RECEIPT REQUESTED

pumps would not have initiated as required on a low-low-low reactor vessel water level trip signal. At 3:30 a.m. on June 5, 1985, while unaware that Division I was inoperable, you removed Division II of the ECCS from service. Since you had removed Division III from service in March 1985, the three ECCS divisions were inoperable and automatic initiation capability of the ECCS in response to a low-low-low reactor vessel water level signal was lost until the problem was discovered and corrected on June 10, 1985. The cause of this event was the lack of adequate design document, inspection, and testing controls in your modification program.

While we recognize that when these violations occurred LaSalle Unit 2 was in cold shutdown, we consider this violation particularly significant because of its similarity to a violation identified in April and for which you were cited in July and to several other recent events for which violations are cited in the enclosed Notice. On April 17, 1985, while performing monthly functional tests on LaSalle Unit 1, your staff determined that two switches for the Unit 1 Automatic Depressurization System (ADS) were miswired, making the trip system "B" for ADS initiation inoperable. This matter was discussed with you during a May 28, 1985 Enforcement Conference, and a Notice of Violation was sent to you on July 18, 1985 for inadequacies in your design and test controls (Reference NRC Inspection Reports 50-373/85017 and 50-374/85017). The causes of the ADS problem were almost identical to the causes of the Unit 2 ECCS problem, even though the trip system "A" for ADS initiation was wired correctly and would have been able to initiate if required.

Item II involves your discovery on July 17, 1985 that the piping to your Unit 1 Regenerative Heat Removal (RHR) shutdown cooling pump high suction flow alarm and isolation switches was installed backwards. A verification walkdown failed to identify this improper installation. This installation resulted in these switches being inoperable during power operation, and a Technical Specification Limiting Condition for Operation was exceeded. Although there are several redundant signals that may provide this same system isolation function, this violation demonstrates other examples of the lack of adequate design document and testing controls in your program.

Item III involves another instance where the piping to the two Unit 2 RHR Shutdown Cooling pump suction high flow isolation switches was installed backwards. Your staff failed to recognize this improper installation during a verification walkdown, but after a review of data associated with an alternate test, identified the problem with the installation of the lines to the switches. Although we recognize the Technical Specification does not require these switches to be operable in cold shutdown, this violation demonstrates further design and testing failures in your modification program.

These violations also demonstrate a need for you to re-examine your commitments made to the NRC with regard to operability testing. On October 30, 1984, the LaSalle plant failed to perform adequate tests on the Standby Gas Treatment System (SBGT) after maintenance work was performed. As a result, plant personnel were not aware that the SBGT was inoperable until the problem was brought to their attention by the NRC Resident Inspector. That event resulted in a recent $25,000 civil penalty. In the April 19, 1985 response to this civil penalty action, Commonwealth Edison Company stated, "In order to preclude this type of problem in the future, LaSalle Station will require that a test be conducted to demonstrate operability anytime a safety-related system is returned to service. A Post Maintenance Operational Test Checklist has been developed to ensure that the post maintenance test specified adequately demonstrates system operability in light of work performed." The violations cited in this Notice indicate that more effective controls must be implemented to ensure that operability tests will be performed on safety-related systems after maintenance or modification and before these systems are returned to service.

To emphasize the need for you to ensure that modifications performed on safety-related systems have adequate controls so that system operability is not jeopardized, and to ensure that an effective program for performing operability tests is implemented, 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 cumulative amount of One Hundred and Twenty-five Thousand Dollars ($125,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the violations described in the enclosed Notice have been categorized collectively as a Severity Level III problem. The base civil penalty for a Severity Level III problem is $50,000. However, after considering the escalation and mitigation factors in the Enforcement Policy, the base civil penalty has been increased by 150 percent because of the multiple examples of the particular violations and your prior poor performance in the area of concern

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

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

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

Sincerely,

James G. Keppler
Regional Administrator

Enclosures:
1. Notice of Violation
   and Proposed Imposition
   of Civil Penalties
2. Inspection Reports
   No. 50-373/85023(DRP)
   No. 50-374/85018(DRP)

cc w/enclosures:
D. L. Farrar, Director
of Nuclear Licensing
G. J. Diederick, Station
Superintendent

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Commonwealth Edison Company
LaSalle Nuclear Power Station
Units 1 and 2

Docket No. 50-373
Docket No. 50-374
License No. NPF-11
License No. NPF-18
EA 85-95

During NRC inspections conducted during the period June 10 - July 24, 1985, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the NRC proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205. The particular violations and the associated civil penalties are set forth below:

I. A. Technical Specification 3.3.3.b requires that with one or more Emergency Core Cooling System (ECCS) actuation instrumentation channels inoperable take the action required by Table 3.3.3.1. Table 3.3.3.1 in Action 30 requires that when the number of operable channels is less than the required minimum of two, place the inoperable channel in the tripped condition within one hour or declare the associated system inoperable.

Contrary to the above, from 3:30 a.m. on June 5, 1985 until 12:10 p.m. on June 10, 1985 when the number of operable channels was less than the required minimum of two, the inoperable ECCS actuation instrumentation channel was not placed in the tripped condition within one hour and the associated system was not declared inoperable.

B. Technical Specification 3.5.2 requires at least two Emergency Core Cooling Systems (ECCS) to be operable in the shutdown condition. With both of the required subsystems/systems inoperable, one subsystem must be restored to operable status within four hours or secondary containment integrity be established within the next eight hours.

Contrary to the above, with the three ECCS Divisions inoperable on June 5, 1985, secondary containment integrity was not established within eight hours.

C. 10 CFR Part 50, Appendix B, Criterion VI, as implemented by the Commonwealth Edison Company's Quality Assurance Manual, Quality Requirement 6.1, requires that a document control system be used to assure that documents such as drawings be distributed to and used at the locations where the prescribed activity is performed.

Contrary to the above, Field Change Request 85-123 dated April 4, 1985 was issued to correct an error in Modification M-1-2-84-136; however, it was not distributed to and used at the location where the prescribed activity was performed. As a result, piping for two switches was installed backwards rendering Division I of the Unit 2 Emergency Core Cooling Systems inoperable.

D. 10 CFR Part 50, Appendix B, Criterion X, as implemented by the Commonwealth Edison Company Quality Assurance Manual, Quality Requirement 10.1, requires that Quality Assurance inspections be conducted at the site during modification activities to verify conformance to applicable drawings.

Contrary to the above, Quality Assurance inspections were not conducted at the site during Modification M-1-2-84-136 to verify conformance to the applicable drawing (FCR 85-123).

E. 10 CFR Part 50, Appendix B, Criterion XI, as implemented by the Commonwealth Edison Company Quality Assurance Manual, Quality Requirement 11.1, requires that the test program include those tests necessary to demonstrate that systems will perform satisfactorily in service following plant maintenance or modifications.

Contrary to the above, Operational Test LIS-NB-204 performed following the completion of Modification M-1-2-84-136 did not adequately demonstrate system operability in that the test only verified the instrument and electrical connections. The piping configuration of the reactor pressure vessel water level reference and variable legs was not verified.

II. A. Technical Specification 3.3.2 requires the isolation actuation instrumentation channels shown in Table 3.3.2-1 to be operable with their trip setpoints set consistent with the values shown in Table 3.3.2-2. The Regenerative Heat Removal (RHR) shutdown cooling pump suction high flow instrumentation is included for Operating Conditions 1, 2, and 3. Technical Specification 3.3.2.c. requires that with the number of operable channels less than the minimum operable channels per trip system required for both trip systems, place at least one trip system in the tripped condition within one hour and take the action required by Table 3.3.2-1. Action Item 25 of Table 3.3.2-1 requires the isolation valves to be closed and locked for the RHR shutdown cooling mode and the system to be declared inoperable.

Contrary to the above, from April 7, 1985 until July 12, 1985, while the plant was in Operating Conditions 1, 2, and 3, the Unit 1 RHR shutdown cooling pump suction high flow sensors would not have met the designated isolation setpoint in that the isolation actuation instrumentation channels were inoperable. With the channels

inoperable, the actions required by Action Item 25 of Table 3.3.2.1 were not taken. The isolation valves were not closed and locked for the RHR shutdown cooling mode and the system was not declared inoperable.

B. 10 CFR Part 50, Appendix B, Criterion VI, as implemented by the Commonwealth Edison Company's Quality Assurance Manual, Quality Requirement 6.1, requires that a document control system be used to assure that documents such as drawings, be distributed to and used at the locations where the prescribed activity is performed.

Contrary to the above, Drawing Change Request 7383, issued to document a piping change to Modification M-1-1-82-054, was not distributed to and used in the development of Modification M-1-1-84-091. As a result, the Unit 1 Regenerative Heat Removal shutdown (RHR) pump cooling suction flow isolation channels were inoperable during power operations from April 7, 1985 until the unit was shutdown on July 12, 1985.

C. 10 CFR Part 50, Appendix B, Criterion XI, as implemented by the Commonwealth Edison Company Quality Assurance Manual, Quality Requirement 11.1, requires that the test program include those tests necessary to demonstrate that systems will perform satisfactorily in service following plant maintenance or modifications.

Contrary to the above, the post-installation testing performed following the completion of Modification M-1-1-84-091 did not adequately demonstrate system operability in that the test did not detect that the Regenerative Heat Removal pump suction high flow isolation switches were piped backwards prior to returning the instruments to service.

III. 10 CFR Part 50, Appendix B, Criterion XI, as implemented by the Commonwealth Edison Company Quality Assurance Manual, Quality Requirement 11.1, requires that the test program include those tests necessary to demonstrate that systems will perform satisfactorily in service following plant maintenance or modifications.

Contrary to the above, during this inspection period, the operability test for two Unit 2 shutdown cooling high flow isolation switches was not performed correctly. Specifically, a walkdown of the piping to these switches identified no problems although the piping to the switches was installed backwards. This error was discovered by an alternate test that was not specified for proof of operability testing.

Collectively, the above violations have been evaluated as a Severity Level III problem (Supplement I).
(Cumulative Civil Penalty $125,000 assessed equally among the violations.)

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, with 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 that have been taken and the results achieved; (4) the corrective steps that will be taken to avoid further violations; and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in the Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Commonwealth Edison Company may pay the civil penalties by letter addressed to the Director, Office of Inspection and Enforcement, with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of One Hundred and Twenty-five Thousand Dollars ($125,000) or may protest imposition of the civil penalties in whole or in part by a written answer addressed to the Director, Office of Inspection and Enforcement. Should Commonwealth Edison 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 Commonwealth Edison 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 penalty, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1985) should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201 but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Commonwealth Edison's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing civil penalties.

Upon failure to pay any civil penalty due, which 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 Glen Ellyn, Illinois
this 27th day of September 1985

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

November 26, 1985

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

Subject: LaSalle County Station Units 1 and 2
Response to Notice of Violation and
Proposed Imposition of Civil Penalty
Inspection Report Nos. 50-373/85-023
and 50-374/85-018 (EA 85-95)

Reference: J. G. Keppler letter to J. J. O'Connor
dated September 27, 1985.

Dear Mr. Taylor:

This is Commonwealth Edison Company's (Edison) response to the above referenced Nuclear Regulatory Commission's (NRC) Notice of Violation, Proposed Imposition of Civil Penalties and accompanying inspection report. As we agreed, this response has been submitted within 60 days of the Notice rather than within the 30 days originally provided. We appreciate the opportunity that this extension of time has given us to explain in detail Edison's comprehensive program for addressing the matters at issue here. Because Edison does not protest the fine, this letter is accompanied by a check as payment in full of the $125,000.00 penalty.

Edison appreciates the significance of the deficiencies identified in the Notice. Our program to ensure the safe operation of our nuclear facilities depends in part on ensuring the correct implementation of plant modifications. Edison acknowledges that the events which gave rise to these deficiencies were unacceptable. To ensure that similar incidents will not recur, Edison has initiated the extensive corrective action discussed below for both the Station and the General Office.

The attachment to this letter describes the wide range of measures, both immediate and long term, which have been instituted by the LaSalle County Nuclear Power Station and General Office management. The immediate measures: (1) ensured that the violations were corrected; (2) determined that no similar violations had gone undetected; and (3) instituted new procedures to prevent a recurrence of similar events. Among the significant longer term measures are the establishment of a committee which, for a trial period, will review post-modification tests for their ability to determine the operability of the modified equipment and the development of a checklist for helping to choose appropriate tests for modified equipment.

These measures demonstrate Edison's continuing commitment to the operational safety of its nuclear stations. Edison believes that such safety will be enhanced by the corrective actions described in this letter and its attachment and, therefore, that the LaSalle County Nuclear Power Station will continue to operate in a manner that fully ensures public health and safety.

Very truly yours,

Cordell Reed
Vice-President

lm

Attachment

cc: J. G. Keppler - Region III
LaSalle Resident Inspector

SUBSCRIBED AND SWORN to
before me this 26th day
of November, 1985
Rosalie A Rizzo
Notary Public

ATTACHMENT

RESPONSE TO NOTICE OF VIOLATION

1A. Technical Specification 3.3.3.b requires that with one or more Emergency Core Cooling System (ECCS) actuation instrumentation channels inoperable take the action required by Table 3.3.3.1. Table 3.3.3.1 in Action 30 requires that when the number of operable channels is less than the required minimum of two, place the inoperable channel in the tripped condition within one hour or declare the associated system inoperable.

Contrary to the above, from 3:30 a.m. on June 5, 1985 until 12:10 p.m. on June 10, 1985 when the number of operable channels was less than the required minimum of two, the inoperable ECCS actuation instrumentation channel was not placed in the tripped condition within one hour and the associated system was not declared inoperable.

ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Commonwealth Edison admits the violation.

REASON FOR THE VIOLATION

This violation resulted from our reliance on post-modification tests which did not accurately determine the operability of the modified Division 1 Low Reactor Water Level Switches.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

1. Initial Responses

As soon as it was discovered that the instruments were inoperable, one of the switches was placed in the tripped condition as required by Action 30 of Table 3.3.3.1 of Technical Specification 3.3.3.b. Appropriate Station Personnel and General Office Management were also informed of the event. Shortly thereafter, the errors were corrected and an investigation was initiated into the causes of the events. The results of these investigations provided bases for additional actions intended to prevent recurrence of similar events.

2. Further Actions

To ensure that no other problems of this type had been missed, several broader actions were taken.

All safety-related modifications made during the Unit 2 outage were reviewed by either the Commonwealth Edison Station Nuclear Engineering Department (SNED) or the architect-engineer. No serious discrepancies requiring further physical changes were discovered. Also, either SNED, the station or the architect-engineer walked down all accessible safety-related modifications made during the Unit 2 outage. The architect-engineer also reviewed for completeness the results of our walkdowns. As a result of these walkdowns, only minor discrepancies between the design documents and as-built configurations were discovered. Only one, a labeling deficiency, required correction in the field. For the others, we have corrected the appropriate documents. Moreover, a Quality Control Inspector independently walked down one hundred twenty-four of the instruments modified during the outage.

All of the test requirements specified in the safety-related work requests and modifications performed during the outage were reviewed completely. Also, it was verified, prior to restart, that all modified instruments would perform as designed.

3. Training

All departments involved conducted informal documented training sessions to discuss the event, its causes, and the corrective actions being taken to prevent its recurrence. This training was accomplished in two steps. First, prior to startup, appropriate personnel in the instrument maintenance, electrical maintenance, and operating departments were trained. After startup, relevant personnel in construction, maintenance, technical staff, and quality control, as well as contractor personnel were also trained. At each of these sessions the significance of the events and their unacceptability were emphasized.

We believe that these training sessions have strengthened post-modification testing procedures by increasing awareness of the need to ensure that testing accomplishes its intended function.

CORRECTIVE ACTION TAKEN TO AVOID FURTHER VIOLATION

1. Revised Modification Procedures

Our analysis of these events led us to change significantly the station's procedures governing the types of actions involved here. These changes in procedure substantially strengthen the process for ensuring that post-modification tests are adequate.

The Station's administrative procedure for plant modifications, LAP 1300-2, has been revised as follows:

a. The procedure now explicitly requires the preparation of post-modification tests in accordance with the newly established "Guidelines for Development of Tests for Modifications" LTP 800-9. These guidelines provide methods for developing tests to ensure that system and component operability are adequately demonstrated after modification. Our confidence in these guidelines is based, in part, on the following new approach incorporated in them. Instead of focusing testing on only modified equipment, testing, where warranted, will now be extended to unmodified parts of a system. By varying input signals at those points in the system and observing the corresponding responses in the modified part of the system we will be better able to verify the operability of the modification. In particular, this procedure would have helped to ensure the proper installation of instrument piping to pressure differential DP type instrumentation.

b. These incidents have also led us to realize the importance of developing in one person an attitude of responsibility for all aspects of a modification. Accordingly, the procedures now require the cognizant modification engineer to be more involved with the installation and testing of modifications. This greater involvement includes maintaining overall knowledge of a modification's design and status, assuring that design intent is implemented in the modification as installed and monitoring progress on the design, installation and testing of a modification.

2. Checklists

These incidents have also demonstrated the limited effectiveness of checklists used to determine system operability. Such checklists were developed after April, 1985 in response to an incident involving inoperability of a train of the Standby Gas Treatment System. Although it was believed that such checklists would be adequate, there was only a limited period of time in which to assess the adequacy of those checklists before the June, 1985 events occurred. Because experience has now shown that checklists limited to system inoperability are not always adequate, the maintenance and operating departments have developed additional checklists which go beyond previous lists by now requiring some testing at the component level. This consideration of finer levels of detail should aid in the selection of testing requirements adequate to demonstrate operability after either maintenance or modification. Accordingly, it is believed that these new lists will help to prevent recurrence of these types of events.

3. Review Committee

To further ensure the adequacy of tests of safety-related modifications, an additional level of review of post-modification tests for their ability to determine the operability of modified equipment has been established. This review will be conducted by a committee which will include the Technical Staff Supervisor, an Operating Engineer or an Assistant Superintendent, and the cognizant Modification Engineer. This committee will review the adequacy of any modified equipment before it is declared operable.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full Compliance has been achieved. The effectiveness of the Review Committee will be evaluated by March, 1986 to determine whether the committee should become a permanent part of the post-modification review process.

1B. Technical Specification 3.5.2 requires at least two Emergency Core Cooling Systems (ECCS) to be operable in the shutdown condition. With both of the required subsystems/systems inoperable, one subsystem must be restored to operable status within four hours or secondary containment integrity be established within the next eight hours.

Contrary to the above, with the three ECCS Divisions inoperable on June 5, 1985, secondary containment integrity was not established within eight hours.

ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Commonwealth Edison admits the violation.

REASON FOR THE VIOLATION

Same as in Item 1A.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

Secondary Containment integrity had been reestablished before it was discovered that the Division I ECCS Systems were inoperable. No further corrective action was necessary.

CORRECTIVE ACTION TAKEN TO AVOID FURTHER VIOLATION

Refer to Item 1A.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full Compliance has been achieved.

1C. 10 CFR Part 50, Appendix B, Criterion VI, as implemented by the Commonwealth Edison Company's Quality Assurance Manual, Quality Requirement 6.1, requires that a document control system be used to assure that documents such as drawings be distributed to and used at the locations where the prescribed activity is performed.

Contrary to the above, Field Change Request 85-123 dated April 4, 1985 was issued to correct an error in Modification M-1-2-84-136; however, it was not distributed to and used at the location where the prescribed activity was performed. As a result, piping for two switches was installed backwards rendering Division I of the Unit 2 Emergency Core Cooling Systems inoperable.

ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Commonwealth Edison admits the violation.

REASON FOR THE VIOLATION

This violation resulted from an inadequate document control procedure. The Station's procedure for controlling Field Change Requests (FCR) did not require the FCR's to list contractor drawings. Therefore, FCR 85-123 did not list all of the drawings for revisions to the installation details for 22 instruments. For 20 of those instruments, the installation details had been revised on the contractor's drawings. For the remaining two instruments, the contractor's production drawings reflected only the original designs because the drawings had not been modified in accordance with the FCR. The FCR had not indicated that those drawings would be affected.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

The installation of the two instruments was corrected and tested to demonstrate the proper reinstallation. To ensure that similar problems had not been missed, all other FCR's generated during the outage were reviewed, and found not to contain any further errors.

CORRECTIVE ACTION TAKEN TO AVOID FURTHER VIOLATION

To prevent a recurrence of this type of error, we have added mandatory cross-references to the Stations' procedures. Station Administrative Procedure LAP 1300-5 "Field Change Requests" has been revised to require an FCR to include a list of all affected documents/drawings, including contractor production drawings. In addition, both the mechanical and the electrical contractors have prepared and implemented procedures to formalize the control of FCR's and requirements for Quality Control field inspection. These procedures require checks to ensure that FCRs are properly posted to all affected drawings.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance has been achieved.

1D. 10 CFR Part 50, Appendix B, Criterion X, as implemented by the Commonwealth Edison Company Quality Assurance Manual, Quality Requirement 10.1, requires that Quality Assurance inspections be conducted at the site during modification activities to verify conformance to applicable drawings.

Contrary to the above, Quality Assurance inspections were not conducted at the site during Modification M-1-2-84-136 to verify conformance to the applicable drawing (FCR 85-123).

ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Commonwealth Edison admits the violation.

REASON FOR THE VIOLATION

This violation resulted from a failure to specify adequate hold points in the instructions for installing modifications.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

All accessible elements of the modifications performed during the outage were completely walked down . To ensure an independent review, this walkdown was conducted by persons who had not been involved with the installations. Moreover, the results of these walkdowns were documented. It was found that all final installations were in accord with the approved final designs.

CORRECTIVE ACTION TAKEN TO AVOID FURTHER VIOLATION

Station procedures have been substantially modified to ensure that inspections will be conducted during modification activities. LaSalle has developed and implemented an administrative procedure LAP 1700-3, "Guidelines for Quality Control Hold Points". This procedure provides guidance to Station Quality Control and Contractor Quality Control personnel in establishing hold points. That guidance requires mandatory hold points for field inspections to verify that safety related modifications have been installed in accordance with approved drawings and specifications.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full Compliance has been achieved.

1E. 10 CFR Part 50, Appendix B, Criterion XI, as implemented by the Commonwealth Edison Company Quality Assurance Manual, Quality Requirement 11.1, requires that the test program include those tests necessary to demonstrate that systems will perform satisfactorily in service following plant maintenance or modifications.

Contrary to the above, Operational Test LIS-NB-204 performed following the completion of Modification M-1-2-84-136 did not adequately demonstrate system operability in that the test only verified the instrument and electrical connections. The piping configuration of the reactor pressure vessel water level reference and variable legs was not verified.

ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Commonwealth Edison admits the violation.

REASON FOR THE VIOLATION

This violation resulted from an inadequate post modification test which was improperly limited to testing the instrument and its electrical connections.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

To ensure that similar problems in other equipment had not been overlooked, all safety-related instrumentation modified during the outage was retested. The retests verified correct instrument response to varying process parameters. All installation errors identified were corrected and retested to verify that the final "as installed" plant condition reflected the "as designed" condition.

CORRECTIVE ACTION TAKEN TO AVOID FURTHER VIOLATION

We believe that the new procedures discussed above in Item I.D will prevent a recurrence of this event. Those procedures, especially the new guidelines for identifying adequate post-modification tests and, in the interim, the committee review of those tests for adequacy, should ensure that all relevant parameters are tested and verified.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full Compliance has been achieved.

2A. Technical Specification 3.3.2 requires the isolation actuation instrumentation channels shown in Table 3.3.2-1 to be operable with their trip setpoints set consistent with the values shown in Table 3.3.2-2. The Residual Heat Removal (RHR) shutdown cooling pump suction high flow instrumentation is included for Operating Conditions 1, 2, and 3. Technical Specification 3.3.2.c. requires that with the number of operable channels less than the minimum operable channels per trip system required for both trip systems, place at least one trip system in the tripped condition within one hour and take the action required by Table 3.3.2-1. Action Item 25 of Table 3.3.2-1 requires the isolation valves to be closed and locked for the RHR shutdown cooling mode and the system to be declared inoperable.

Contrary to the above, from April 7, 1985 until July 12, 1985, while the plant was in Operating Conditions 1, 2, and 3, the Unit 1 RHR shutdown cooling pump suction high flow sensors would not have met the designated isolation setpoint in that the isolation actuation instrumentation channels were inoperable. With the channels inoperable, the actions required by Action Item 25 of Table 3.3.2.1 were not taken. The isolation valves were not closed and locked for the RHR shutdown cooling mode and the system was not declared inoperable.

ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Commonwealth Edison admits the violation.

REASON FOR THE VIOLATION

This violation resulted from our reliance on post-modification tests which did not accurately determine the operability of the RHR Shutdown Cooling High Flow isolation switches.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

The discovery of the inoperable switches was made when the plant was in an Operational Condition which did not require those switches to be operable. Accordingly, no immediate action was required. Before entering an Operational Condition in which those switches were required to be operational, the piping errors were corrected, and it was verified that the switches could perform their isolation functions.

CORRECTIVE ACTION TAKEN TO AVOID FURTHER VIOLATION

Refer to Item 1A.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full Compliance has been achieved.

28. 10 CFR Part 50, Appendix B, Criterion VI, as implemented by the Commonwealth Edison Company's Quality Assurance Manual, Quality Requirement 6.1, requires that a document control system be used to assure that documents such as drawings, be distributed to and used at the locations where the prescribed activity is performed.

Contrary to the above, Drawing Change Request 7383, issued to document a piping change to Modification M-1-1-82-054, was not distributed to and used in the development of Modification M-1-1-84-091. As a result, the Unit 1 Regenerative Heat Removal shutdown (RHR) pump cooling suction flow isolation channels were inoperable during power operations from April 7, 1985 until the unit was shutdown on July 12, 1985.

ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Commonwealth Edison admits the violation.

REASON FOR THE VIOLATION

This violation resulted from the failure to ensure that changes to the plant were reflected on current plant drawings. The violation occurred as described below.

On May 10, 1982 it had been discovered that the original flow switches 1E31-N012A and 1E31-N012B were piped backwards due to the High and Low Process Lines being reversed inside the Suppression Pool. Accordingly, WR #L15576 and modification #M-1-1-82-054 were issued to correct the piping and (in addition) install pressure snubbers. Snubbers were added and the repiping was performed by reversing the tubing locally at the instrument rack. Upon satisfactory resolution of M-1-1-82-054, Drawing Change Request #73-83 was submitted to reflect: (1) The inclusion of pressure snubbers, and (2) the changes to the process line, root valve, and Excess Flow Check Valve numbers associated with 1E31-N012A and B (with the Drywell Penetration Numbers remaining the same). Based on their request for more information with regard to the snubber installation, the Architect Engineer (A/E) rejected DCR 73-83. DCR 73-83 (which included the revised drawing #M-2096-5) was inadvertently closed out without the appropriate changes being made. Therefore, when 1E31-N012A and B were removed and later replaced by 1E31-N012AA/AB/BA/BB, their process inputs (High vs Low) became crossed, due to drawing #M-2096-5 having never been revised.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

Our investigation of the situation revealed that it had resulted from a failure to properly complete action on a Drawing Change Request (DCR). To ensure that similar problems had not been overlooked, the Station's, the Architect Engineer's (A/E), and the Station Nuclear Engineering Department's (SNED), Drawing Change Request logs were reviewed to identify DCRs which had been rejected or cancelled. All rejected, open or cancelled DCR's were verified to reflect properly on the critical drawings and/or the appropriate drawing aperture cards. No further discrepancies were found. The DCR for Modification M-1-1-84-91 reflected the previously rejected drawing change request.

CORRECTIVE ACTION TAKEN TO AVOID FURTHER VIOLATION

This incident alerted us to a procedural deficiency in our handling of DCR's. On that basis, SNED initiated a review of its procedure for control of DCR's. This review indicated that SNED had revised its DCR procedure in August 1984 to provide a specific procedure for handling DCRs rejected or cancelled by the A/E. This procedure was not in effect at the time this incident occurred. It is believed that the current procedure will prevent the recurrence of a similar problem.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance has been achieved.

2C. 10 CFR Part 50, Appendix B, Criterion XI, as implemented by the Commonwealth Edison Company Quality Assurance Manual, Quality Requirement 11.1, requires that the test program include those tests necessary to demonstrate that systems will perform satisfactorily in service following plant maintenance or modifications.

Contrary to the above, the post-installation testing performed following the completion of Modification M-1-1-84-091 did not adequately demonstrate system operability in that the test did not detect that the Regenerative Heat Removal pump suction high flow isolation switches were piped backwards prior to returning the instruments to service.

ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Commonwealth Edison admits the violation.

REASON FOR THE VIOLATION

See Item 2A.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

See Item 2A.

CORRECTIVE ACTION TAKEN TO AVOID FURTHER VIOLATION

Refer to Item 1A.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full Compliance has been achieved.

3. 10 CFR Part 50, Appendix B, Criterion XI, as implemented by the Commonwealth Edison Company Quality Assurance Manual, Quality Requirement 11.1, requires that the test program include those tests necessary to demonstrate that systems will perform satisfactorily in service following plant maintenance or modifications.

   Contrary to the above, during this inspection period, the operability test for two Unit 2 shutdown cooling high flow isolation switches was not performed correctly. Specifically, walkdown of the piping to these switches identified no problems although the piping to the switches was installed backwards. This error was discovered by an alternate test that was not specified for proof of operability testing.

ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

Commonwealth Edison admits the violation.

REASON FOR THE VIOLATION

As a result of previously identified installation errors a system walkdown was designated in June, 1985 as corrective action to verify that all piping was installed in accordance with design drawings modified during the outage. A Technical Staff Engineer was assigned to perform a walkdown of the RHR Shutdown Cooling pump suction high flow isolation switches. The Engineer who performed the walkdown had traced the piping to a wall penetration and when he went to the other side of the wall he reoriented himself with informal markings on the piping which were reversed. The remainder of the inspection was performed utilizing the reversed reference.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

Our investigation to determine the cause of the walkdown error identified the problems that could have contributed to it. As a result, a second walkdown of all process instrumentation piping which penetrated walls was conducted by two Technical Staff personnel, one on either side of the wall. Moreover, all differential pressure instrumentation was verified by performing a second test by varying the process which the instrumentation measured. The piping was corrected and it was verified that the installation was correct by conducting a retest which measured flow in the system.

CORRECTIVE ACTION TAKEN TO AVOID FURTHER VIOLATION

Refer to Item 1A.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full Compliance has been achieved.

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

NOV 0 8 1985

Docket Nos. 50-373; 50-374
Licenses No. NPF-11; NPF-18
EA 85-114

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 D. A. Kers of this office on August 27-28, 1985 and Mr. J. L. Belanger on September 3-6, 1985, of activities at the LaSalle County Station, Units 1 and 2, authorized by NRC Operating Licenses No. NPF-11 and No. NPF-18. The results of this inspection were discussed on September 17, 1985 during an Enforcement Conference between Mr. C. Reed and others of your staff and Mr. A. B. Davis and others of the NRC Region III staff.

The inspection revealed that you did not adequately protect the integrity of the badge system which could have allowed access into protected and vital areas of the LaSalle facility. This violation reflects a weakness in fully implementing and maintaining in effect the provisions of your NRC-approved Physical Security Plan. Of significant concern is the fact that the event involved faulty judgment on the part of top level security management at the LaSalle facility. We are also concerned with your improper reporting of the event to the NRC. Although you reported the event to the Resident Inspector and the Region III Office, you did not report the event to the NRC Operations Center in accordance with 10 CFR 73.71(c).

To emphasize the importance of maintaining adequate control over the integrity of your badge system, 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 Thirty-seven Thousand Five Hundred Dollars ($37,500) for the violation described in the enclosed Notice. The violation has been categorized as a Severity Level III violation in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985).

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The event could have been categorized as a Severity Level II violation under the Enforcement Policy in that two of the three elements of access control were inadequate in both the protected and vital areas. However, the possibility of a security compromise was significantly reduced because of the small probability of locating and using the keycards. Therefore, the event which occurred at the LaSalle facility is appropriately classified as a Severity Level III violation.

The base civil penalty for a Severity Level III violation is $50,000. The NRC Enforcement Policy allows for reduction of a civil penalty under certain circumstances. In this case, the base civil penalty is reduced by 25 percent because of your prompt and extensive corrective action which included: (1) an intensive effort to recover all improperly discarded badges; (2) posting a security officer at the ingress turnstile to assure proper usage of cards; (3) reviewing 6,000 files to identify rejected badges; (4) identifying and deleting 2,125 badge numbers from the system; (5) revising the procedure for badge issuance and disposal; and (6) issuing directives to all CECo nuclear stations concerning badge disposal. We considered reducing the civil penalty by an additional 25 percent. However, no further mitigation is warranted because the violation was caused by actions of plant security management, contrary to security training procedures, and resulted in the badges being potentially available for misuse for approximately two months before the discovery of the improper disposal.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. You should place all Safeguards Information as defined in 10 CFR 73.21 only in enclosures, so that your letter may be placed in the Public Document Room. After reviewing your response to this Notice, including your proposed corrective actions, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

The material enclosed contains Safeguards Information as defined by 10 CFR 73.21 and its disclosure to unauthorized individuals is prohibited by Section 147 of the Atomic Energy Act of 1954, as amended. Therefore, with the exception of the cover letter, this material will not be placed in the 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,

James G. Keppler
Regional Administrator

Enclosures:
1. Notice of Violation and Proposed Imposition of Civil Penalty
2. Inspection Reports
   No. 50-373/85029(DRSS); and
   No. 50-374/85030(DRSS)
(UNCLASSIFIED SAFEGUARDS INFORMATION)

cc w/enclosures:
D. L. Farrar, Director
of Nuclear Licensing
G. J. Diederich, Plant
Manager
IE File
IE/DI/ORPB
IE/ES
NMSS/SGPL
NRR/DL/SSP3
ACRS

cc w/enclosures, w/o UNCLASSIFIED
SAFEGUARDS INFORMATION:
DCS/RSB (RIDS)
Licensing Fee Management Branch
Resident Inspector, RIII
Phyllis Dunton, Attorney
General's Office, Environmental
Control Division

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

December 2, 1985

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

Subject: LaSalle County Station Units 1 and 2
Response to Notice of Violation and
Proposed Imposition of Civil Penalty
Inspection Report Nos. 50-373/85-029
and 50-374/85-030 (EA 85-114)

Reference: J. G. Keppler letter to J. J. O'Connor
dated November 8, 1985.

Dear Mr. Taylor:

This is Commonwealth Edison Company's (Edison) response to the above referenced Nuclear Regulatory Commission's (NRC) Notice of Violation, Proposed Imposition of Civil Penalty and accompanying inspection report. This response has been submitted within the 30 days as specified. Because Edison does not protest the fine, this letter is accompanied by a check as payment in full of the $37,500.00 penalty.

Edison appreciates the significance of the deficiencies in our security program identified in the Notice. Edison acknowledges that the events which gave rise to these deficiencies were unacceptable. To ensure that similar incidents will not recur, Edison has initiated the corrective action discussed in the attachment.

The attachment to this letter describes the measures, both immediate and long term, which have been instituted by the LaSalle County Nuclear Power Station and General Office management. These measures demonstrate Edison's continuing commitment to security at our nuclear stations. Edison believes that our security program will be enhanced by the corrective actions described.

The material enclosed contains Safeguards Information as defined in 10 CFR 73.21. The security marking on this letter does not apply when this letter is separated from the enclosure.

Very truly yours,

Cordell Reed
Vice-President

bs

Attachment

cc: J. G. Keppler - Region III
LaSalle Resident Inspector

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

JUL 22 1983

Docket Nos. 50-289
50-320
EA 32-124

General Public Utilities
ATTN: Robert C. Arnold
Chief Executive Officer
GPU Nuclear Corporation
100 Interpace Parkway
Parsippany, NJ 07054

Gentlemen:

An investigation was conducted by NRC's Office of Investigations during the periods July 24 through 31, 1981, September 16 through October 2, 1981 and October 19 through 22, 1981 at the Three Mile Island Nuclear Station. The purpose was to investigate allegations that certain operators and senior operators cheated on the NRC Written Requalification Examination or on quizzes administered as part of the licensee's operator requalification program, and whether the licensee was responsible for the cheating. In addition to this investigation, the allegations were considered by the Atomic Safety and Licensing Board ("ASLB") presiding over the restart hearings. The ASLB appointed a Special Master to conduct a supplementary proceeding to determine whether cheating occurred. The Special Master issued his report on April 28, 1982 (15 NRC 918) and the ASLB reviewed the report and issued its Partial Initial Decision in the matter on July 27, 1982. (LBP-82-56, 16 NRC____)

The ASLB recommended that a civil penalty of $100,000 be imposed upon GPU because its management negligently failed to safeguard the integrity of the examination process, because it failed to instill an attitude of respect for the company and NRC examination process, because it failed to assure the quality of training instruction, and because of negligence in the procedures for certification of candidates for the NRC licensing examinations.

On October 14, 1982 the Commission directed the Office of Inspection and Enforcement to consider the ASLB's recommendation and to determine whether a civil penalty should be imposed on GPU. The staff has reviewed the record developed by the Special Master and the final reports of the Special Master and the ASLB in reaching its conclusions.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The staff has concluded that the licensee's training and testing program failed to satisfy commitments made by the licensee on September 12, 1979, as amended on October 9, 1979, in responding to the Commission's Order dated August 9, 1979 (CLI-79-8, 10 NRC 141, 144). The Order required the licensee to augment the retraining of all reactor operators and senior reactor operators assigned to the control room including training in the areas of natural circulation and small break loss of coolant accidents. The licensee was also required to conduct a 100% reexamination of all operators in these areas. In responding to the Order, the licensee instituted the Operator Accelerated Retraining Program (OARP) and committed to conducting lectures and weekly quizzes for operators who failed portions of the examination given at the end of the OARP to evaluate trainee knowledge level. However, because of the informality of the implementation of the licensee's program and the conditions which allowed cheating to take place, the staff concludes that the program did not satisfy those commitments and a violation occurred.

Another investigation was conducted by the Office of Investigations during the period September 27, 1982 through December 1, 1982. This investigation indicates that material false statements were willfully submitted to the NRC when a senior reactor operator applying for license renewal stated that he had satisfactorily completed the operator requalification program and the Station Manager, who was aware that the operator had passed certain sections of the required take-home exams by submitting someone else's work as his own, certified the operator as having achieved a satisfactory rating in the requalification program.

As a result of this investigation, the Commission has determined that willful material false statements were submitted to the NRC by the licensee in an August 3, 1979 letter and a November 15, 1979 application for license renewal. The August 3, 1979 letter contained false statements in that (1) it identified only two of the three weak areas in the Operator Requalification Program that required additional training, and (2) it omitted any reference to the cheating which occurred on the Operator Requalification Examination. The November 15, 1979 license application contained a false statement in that VV's license application stated that he had satisfactorily completed the operator requalification program, even though he had cheated on at least some portion of it.

The statements described above were material because they could have affected the decision-making process. If the NRC had known the correct information, including the fact that VV cheated, it would have required more direct evidence of retesting on the sections in which VV received help. Therefore, the statements made in the August 3, 1979 and November 15, 1979 submittals are considered material.

To emphasize the need for (1) complete and accurate communications with the Commission, and (2) implementing a requalification program capable of ensuring proper training of operators and senior operators and of accurately evaluating their knowledge in areas necessary for the safe operation of the plant, we propose to impose civil penalties upon GPU in the cumulative amount of One Hundred Forty Thousand Dollars for the violations described in the enclosed Notice of Violation. The violation relating to the implementation of the training and requalification program has been categorized as Severity Level III in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C) published in the Federal Register, 47 FR 9987 (March 9, 1982). The other violation, relating to the material false statements, has been categorized as Severity Level I and a civil penalty of $100,000 has been proposed for this violation.

You are required to respond to the Notice of Violation and Proposed Imposition of Civil Penalties. In preparing your response you should follow the instructions specified in the Notice. 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 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 Public Document Room.

The responses directed by this letter and the enclosed Notice of Violation 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,

R. C. DeYoung

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalty

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

General Public Utilities
Three Mile Island, Units 1 and 2

Docket Nos. 50-289, 50-320
License Nos. DPR-50, DPR-73
EA 82-124

As a result of information learned through investigations conducted during the periods July 24 through 31, 1981, September 16 through October 2, 1981, October 19 through 22, 1981, and September 27 through December 1, 1982 at Three Mile Island, Dauphin County, Pennsylvania, and from the record compiled through the Supplementary Proceeding conducted by the Special Master, Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), LBP-82-34B, 15 NRC 918 (1982), (hereinafter, Report), and the Partial Initial Decision by the Atomic Safety and Licensing Board (ASLB), Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), LBP 82-56, 15 NRC ____ (1982), (hereinafter, PID), it appears that a violation occurred involving the submittal of false information to the NRC.

The Supervisor of Operations submitted work prepared by another operator in completion of a take-home examination given as part of his training. His passing grade was based in part on this other person's work. With full knowledge of this act of cheating, the Station Manager nevertheless certified in his August 3, 1979 letter to the NRC that the Supervisor had successfully completed his accelerated retraining program. Subsequently, on November 15, 1979, the Supervisor submitted an application for license renewal that stated that he had satisfactorily completed the operator requalification program. These submittals constitute willful material false statements.

In addition, it appears that a violation occurred involving the implementation of your operator requalification program in that it was inadequate to ensure an accurate assessment of the operators' knowledge. The informal manner in which the licensee conducted the requalification program and the example set by members of management of disrespect for the training process resulted in the certification by the licensee of operators who achieved passing scores on licensee-administered exams and quizzes in part by cheating.

Individuals G and H were found by the Special Master, (Report, at ¶77) and the ASLB (PID, at ¶2120) to have cheated by sharing answers on licensee quizzes conducted on November 2 and 26, 1980 and March 27, 1981. The Special Master (Report, at ¶305) and the ASLB (PID, at ¶2092) also found that O and W had cheated during the licensee "mock" exam conducted on April 2-3, 1981. Finally, GG, W, and MM were involved in an episode of cheating during the licensee quiz administered on December 19, 1980. The Special Master, (Report, at ¶313) and the Board (PID, at ¶2133) concluded that, although it was difficult to determine who copied from whom, it appears to have occurred with GG's participation.

To emphasize the need for complete and accurate communications with the Commission, the Nuclear Regulatory Commission proposes to impose a civil penalty in the amount of $100,000. To emphasize the need for implementing a requalification program capable of ensuring proper training of operators and senior operators and of accurately evaluating their knowledge in areas necessary for the safe operation of the plant, the Nuclear Regulatory Commission proposes to impose an additional civil penalty in the amount of $40,000.

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 particular violations and the associated penalties are set forth below:

A. On August 3, 1979, in a letter to the NRC, the Station Manager at GPU certified that an operator, who was the Supervisor of Operations, had received a satisfactory rating upon completion of the operator requalification program. On November 15, 1979, the operator's application for license renewal stated that he, the operator, had satisfactorily completed the operator requalification program. These statements were made even though the operator and the Station Manager were aware that the operator had used another person's work in completion of examinations required in the requalification program.

Contrary to Section 186 of the Atomic Energy Act of 1954, as amended, the statements in the August 3, 1979 letter and the November 15, 1979 license application and attached certification constitute material false statements. The August 3, 1979 letter contained false statements in that (1) it identified only two of the three weak areas in the Operator Requalification Program that required additional training, and (2) it omitted any reference to the cheating which occurred on the Operator Requalification Examination. The November 15, 1979 license application contained a false statement in that VV's license application stated that he had satisfactorily completed the operator requalification program, although he had cheated on at least some portion of it.

If the NRC had known the correct information, including the fact that the operator cheated, it would have required more direct evidence of retesting on the sections in which the operator received help. Therefore, the statements made in the August 3, 1979 and November 15, 1979 submittals, are considered material. Because the operator and the Station Manager knew that their statements were false when they made them, they constitute willful material false statements, and each day the statements remained uncorrected despite opportunities to correct them up until the time NRC became aware of them in 1981 is a separate omission and, therefore, a material false statement.

This is a Severity Level I violation (Supplement VII)
Civil Penalty - $100,000

B. On August 9, 1979 the Commission ordered Three Mile Island, Unit No. 1 to remain in cold shutdown until certain short-term actions were completed and until reasonable progress was made toward satisfactory completion of certain long-term actions. Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit 1), CLI-79-8, 10 NRC 141 (1979). The order included a provision concerning augmentation of "retraining of all Reactor Operators and Senior Reactor Operators assigned to the control room including training in the areas of natural circulation and small break loss of coolant accidents..." Id. at 144.

In the licensee's September 12 and 14, 1979 responses to the Order, GPU committed to establish an Operator Accelerated Retraining Program (OARP) to accomplish certain objectives necessary for resuming operation of TMI-1. Operators who failed portions of the exam given at the end of the OARP were required to attend lectures and take weekly quizzes to enable the licensee to evaluate its trainees' knowledge level.

Contrary to the above, the implementation of the licensee's training program was not capable of ensuring proper training of operators and senior operators or of accurately evaluating trainee knowledge level in areas necessary for safe operation of the plant in that cheating occurred during the licensee-administered quizzes on November 2 and 26, 1980, December 19, 1980, March 27, 1981 and the mock exam on April 2-3, 1981.

This is a Severity Level III violation (Supplement VII)
Civil Penalty - $40,000

Pursuant to the provisions of 10 CFR 2.201, General Public Utilities is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, DC 20555, and a copy to the Regional Administrator, USNRC, Region I 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 have been 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, General Public Utilities may pay the civil penalty in the amount of One Hundred Forty Thousand Dollars or may protest imposition of the civil penalty

in whole or in part by a written answer. Should General Public Utilities fail to answer within the time specified, this office will issue an Order imposing the civil penalty in the amount proposed above. Should General Public Utilities 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 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. Any 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. General Public Utilities' 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, 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

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 22ndday of July, 1983

GPU Nuclear Corporation
Post Office Box 480
Route 441 South
Middletown, Pennsylvania 17057-0191
717 944-7621
TELEX 84-2386
Writer's Direct Dial Number:

August 2, 1984
5211-84-2188

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

Dear Sir:

Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Payment of Civil Penalty Related to Operator Cheating

By letter dated July 22, 1983, you provided a Notice of Violation and proposed a penalty in the amount of $100,000 for alleged willful material false statements in 1979 in connection with Licensee's retraining and qualification programs. In the same letter, you issued a second Notice of Violation and proposed a related penalty in the amount of $40,000 for cheating which occurred during Licensee-administered quizzes and mock exams.

Our response to the Notice of Violation and related proposed $100,000 penalty will be provided within 30 days of release to us of the reference documents that were requested by letter dated August 5, 1983 (5211-83-223). This schedule was approved in your letter dated August 22, 1983.

With respect to the Notice of Violation and related $40,000 penalty, we have already advised the Commission that we would not contest the penalty. A check for $40,000 is enclosed. We intend to respond to the details of the associated Notice of Violation within the same approved 30-day period following receipt of NRC's reference documents.

Sincerely,

H. D. Hukill
Director, TMI-1

HDH:CWS:ELB:vjf
Enclosure: Check No. 00121469
cc: R. Conte
J. Van Vliet

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

FEB 01 1985

Docket No. 50-289
License No. DPR-50
EA 82-124

GPU Nuclear Corporation
ATTN: Mr. P. R. Clark
President, GPU Nuclear Corporation
100 Interpace Parkway
Parsippany, New Jersey 07054

Gentlemen:

This is with reference to our Notice of Violation and Proposed Imposition of Civil Penalty (Notice) dated July 22, 1983. In your letter dated August 5, 1983 you requested an extension of time to respond to the Notice until thirty days after receipt of a copy of the investigation reports supporting the issuance of the Notice. Mr. R. C. DeYoung, Director, Office of Inspection and Enforcement, by letter dated August 22, 1983, informed you that a decision had not been made on releasing the requested reports and that the time allowed for your response was extended until thirty days after the date of such decision. In your letter dated August 2, 1984 you sent $40,000 as partial payment of the proposed civil penalty and restated your intention to respond to the Notice within thirty days following receipt of the requested reports.

Three of the requested reports, which cover the investigations referred to in the Notice and which were conducted during the periods July 24 through 31, 1981, September 16 through October 2, 1981, and October 19 through 22, 1981, were exhibits in the Supplementary Proceeding conducted by the Special Master, Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1) LBP-82-34B, 15 NRC 918 (1982). They are HQS-81-003 dated August 11, 1981 (Staff Exhibit 26); HQS-81-004 dated October 13, 1981 (Staff Exhibit 27); and HQS-81-005 dated October 28, 1981 (Staff Exhibit 28). The remaining report of investigation conducted from September 27 through December 1, 1982, is enclosed. The reports have been edited to protect the privacy of persons named therein where necessary. Your time to answer the Notice of Violation and Proposed Imposition of Civil Penalty dated July 22, 1983 expires thirty (30) days from the date of this letter.

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 10 days of the date of this letter, and submit written

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

FEB 0 1 1985

application to withhold information contained therein. Such application must be consistent with the requirements of 10 CFR 2.790(b)(1). If we do not hear from you in this regard within the specified periods noted above, the reports will be made available to the public and placed in the Public Document Room.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosure: OI Report H-82-002

Met-Ed / GPU

Metropolitan Edison Company
Post Office Box 542
Reading Pennsylvania 19640
215 929-3601

Writer's Direct Dial Number

April 15, 1985

Mr. James M. Taylor, Director
Office of Inspection and Enforcement
Nuclear Regulatory Commission
Washington, D. C. 20555

Re: Three Mile Island Nuclear Station, Units 1 and 2
("TMI-1" and "TMI-2")
Operating License Nos. DPR-50 and DPR-73
Dockets Nos. 50-289 and 50-320
Partial Answer Pursuant to 10 CFR § 2.201 to Notice of Violation and Proposed Imposition of Civil Penalty, Dated July 22, 1983 ("NOV")

Dear Sir:

This Partial Answer to the Notice of Violation and Proposed Imposition of Civil Penalty, dated July 22, 1983 ("NOV") is submitted by Metropolitan Edison Company ("Met-Ed") which was the licensee of TMI-1 and TMI-2 at the time that the actions and omissions in 1979 specified in the NOV took place. This Partial Answer is directed to the portions of the NOV which require the Licensee to submit

> "a written statement or explanation including for each violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted."

The balance of the answer to the requirements of the NOV requiring

> "a written statement or explanation [of] ...(3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which have been taken to avoid further violations; and (5) the date when full compliance will be achieved"

is being provided in a contemporaneous written submittal by GPU Nuclear Corporation ("GPUNC"), the current licensee of TMI-1 and TMI-2.

(1) Admission or denial of the alleged violations

A. With respect to the alleged violation set forth in Item A on page 2 of the NOV:

Neither the undersigned nor any other present officer of Met-Ed has first-hand knowledge of, or contemporaneous involvement with, the facts and surrounding circumstances concerning the charge made in Item A, page 2, of the NOV sufficient to provide a basis for either affirming or denying the specific citation set forth in this Item. However, based on my review of the relevant portions of the Partial Initial Decision ("PID"), dated July 27, 1982, of the Atomic Safety and Licensing Board ("ASLB"), in Docket 50-289, the Report, dated March 21, 1983 of the Commission's Office of Investigations and its Attachments (collectively, the "OI Report"), and the two reports ("Speaker I" and "Speaker II") of Fred Speaker, a member of the Pepper, Hamilton & Sheetz law firm, I am unable to conclude that the specific violations alleged in this Item have been fully substantiated.

There is enclosed, in accordance with the instructions in the penultimate paragraph of the NOV, a Separate Answer in accordance with 10 CFR 2.205 requesting mitigation or partial remission of the civil penalty. As set forth in that Separate Answer and its accompanying Memorandum, Met-Ed believes that violations occurred but that the nature of those violations differs from that stated in Item A of the NOV, and Met Ed, therefore, requests that Item A of the NOV be modified to eliminate the characterization of the violations as "willful" and that a portion of the civil penalty be remitted.

Notwithstanding that view, there is enclosed, under protest, Met-Ed's check in the amount of $100,000 in payment of the civil penalty of $100,000 imposed by Item A of the NOV.

B. With respect to the alleged violation set forth in Item B on page 3 of the NOV:

Met Ed admits that, as charged in the NOV:

> "On August 9, 1979 the Commission ordered Three Mile Island, Unit No. 1 to remain in cold shutdown until certain short-term actions were completed and until reasonable progress was made toward satisfactory completion of certain long-term actions. Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit 1), CLI-79-8, 10 NRC 141 (1979). The order included a provision concerning augmentation of 'retraining of all Reactor Operators and Senior Reactor Operators assigned to the control room including training in the areas of natural circulation and small break loss of coolant accidents. . .' Id. at 144.
>
> "In the licensee's September 12 and 14, 1979 responses to the Order, [Met-Ed] committed to establish an Operator Accelerated Retraining Program (OARP) to accomplish certain objectives necessary for resuming operation of TMI-1. Operators who failed portions of the exam given at the end of the OARP were required to attend lectures and take weekly quizzes to enable the licensee to evaluate its trainees' knowledge level.
>
> "Contrary to the above, the implementation of the licensee's training program was not capable of ensuring proper training of operators and senior operators or of accurately evaluating trainee knowledge level in areas necessary for safe operation of the plant in that cheating occurred during the licensee administered quizzes on November 2 and 26, 1980, December 19, 1980, March 27, 1981 and the mock exam on April 2-3, 1981."

The imposition of a civil penalty in the amount of $40,000 with respect to this item was not contested and payment of that amount was made on or about August 2, 1984.

(2) The reasons for the violations if admitted

As to Item A

Met Ed believes that the reasons for the violation are as stated in the Separate Answer pursuant to 10 CFR 2.205 and its accompanying Memorandum.

As to Item B

This matter has been the subject of hearings in the Commission's Docket 50-289, resulting in the July 27, 1982 PID of the ASLB, which sets forth the reasons for the violations.

Very truly yours,

Floyd J. Smith
President

Enclosure
cc: J. Stolz
T. Murley
R. Conte

Sworn to and Subscribed
Before me this 15th day
of April, 1985

Susan Unger
Notary Public

SUSAN UNGER
Notary Public, State of New York
No. 31-4707949
Qualified in New York County
Commission Expires March 30, 1987

Met-Ed / GPU

Metropolitan Edison Company
Post Office Box 542
Reading Pennsylvania 19640
215 929-3601

Writer's Direct Dial Number

April 15, 1985

Mr. James M. Taylor, Director
Office of Inspection and Enforcement
Nuclear Regulatory Commission
Washington, D. C. 20555

Re: Three Mile Island Nuclear Station, Units 1 and 2
("TMI-1" and "TMI-2")
Operating License Nos. DPR-50 and DPR-73
Dockets Nos. 50-289 and 50-320
Separate Answer Pursuant to 10 CFR 2.205 to
Item A of Notice of Violation and Proposed Imposition
of Civil Penalty, dated July 22, 1983 ("NOV")

Dear Sir:

This Separate Answer Pursuant to 10 CFR 2.205 with respect to Item A of the Notice of Violation and Proposed Imposition of Civil Penalty, dated July 22, 1983 ("NOV"), is submitted by Metropolitan Edison Company ("Met-Ed") which was the licensee of TMI-1 and TMI-2 at the time that the actions and omissions in 1979 specified in the NOV took place.

For the reasons stated in the accompanying Memorandum, Met Ed believes that (1) the violations charged in Item A of the NOV are not fully substantiated in that such violations should not be characterized as "willful" and, therefore, that the statement of violations should be modified, and (2) the civil penalty imposed by the NOV should be appropriately mitigated or remitted.

Very truly yours,

F. J. Smith
President

cc: J. Stolz
T. Murley
R. Conte

Sworn to and Subscribed
Before me this 15th day
of April 1985

Susan Unger
Notary Public

Susan Unger
NOTARY Public, State of New York
No. 31-4707949
Qualified in New York County
Commission Expires March 30, 1987

MEMORANDUM

of

METROPOLITAN EDISON COMPANY

Accompanying

Separate Answer, Dated April 15, 1985 Pursuant to 10 CFR 2.205 with Respect to Item A of the Notice of Violation and Proposed Imposition of Civil Penalty, Dated July 22 1983.

April 15, 1985

FOREWORD

I am Floyd J. Smith, President of Metropolitan Edison Company ("Met Ed").

At the time of the Three Mile Island Unit No. 2 ("TMI-2") accident on March 28, 1979, I was Vice President-Administration of GPU Service Corporation ("GPUSC"). On September 1, 1979, while remaining Vice President-Administration of GPUSC, I became a Senior Vice President of Met Ed. I retained these positions until February 1, 1982, when, following my election as President of Met Ed, I resigned my position as Vice President-Administration of GPUSC. In addition, I have been a director of Met-Ed since October 1979, of GPUSC since January 1982, and of GPU Nuclear Corporation since January 1982.

The Office of Inspection and Enforcement ("I&E") of the Nuclear Regulatory Commission ("Commission" or "NRC") has issued a Notice of Violation and Proposed Imposition of Civil Penalty, dated July 22, 1983 ("NOV"). Item A of the NOV relates in part to a letter, dated August 3, 1979, to the NRC signed by G. P. Miller, then TMI Station Manager, certifying that an operator (identified as "VV" in the proceeding hereinafter mentioned and in this Memorandum), who was then the TMI-2 Supervisor of Operations (but who was shortly thereafter reassigned), had received a satisfactory rating upon completion of the TMI operator accelerated requalifica-

tion program. The NOV asserts that the August 3, 1979 letter and a subsequent November 15, 1979 certification of the operator contain willful material false statements.

Neither I nor any other present officer of Met Ed has any first-hand knowledge of, or contemporaneous involvement with, facts and surrounding circumstances concerning the charge made in Item A of the NOV to provide a basis for affirming or denying the accuracy of the charges in the NOV. However, these matters were, in part, the subject of a hearing before a Special Master in the Reopened TMI-1 Restart Proceeding that resulted in a report of the Special Master, dated April 28, 1982 and a Partial Initial Decision, dated July 27, 1982 ("PID"), of the Atomic Safety and Licensing Board ("ASLB"), assigned to conduct the proceeding in Docket No. 50-289. I have read with care what have been identified for me as the portions of the PID relevant to Item A of the NOV.

The PID of the ASLB recommended that the Commission direct the NRC staff to conduct an investigation into the August 3, 1979 letter certification of VV to the NRC for operator license renewal. In its Memorandum and Order, dated October 14, 1982, the Commission agreed with the ASLB that there was reasonable cause to inquire further into the matter and directed its Office of Investigations ("OI"), which had already commenced an investigation, to continue with that investigation and to provide its findings, when available, to I&E.

OI conducted its investigation and, under date of March 21, 1983, issued (for limited distribution) its 57 page detailed report with 28 Attachments (many of which are multi-page documents) and a 3-1/2 page summary (collectively, the "OI Report"). The OI Report was made available to Met Ed about February 1, 1985. I have read with care the OI Report and its Attachments.

The TMI-2 accident occurred more than six years ago. The certification of VV in the August 3, 1979 letter occurred almost six years ago. The hearings on these matters before the Special Master were held in November and December 1981. The OI investigation was conducted in the Fall of 1982. I concluded that it was unlikely (given both the investigations heretofore made and the passage of time since the events in question) that additional probative evidence could be developed at this late date, either by attempting to retread the same investigative ground that had already been so extensively covered by OI or by undertaking new lines of inquiry. I also concluded that the OI investigation had demonstrated that some of the assumptions made, and concerns expressed, by the ASLB were without compelling substantive foundation, and that these assumptions and concerns of the ASLB were probably the consequence of what the ASLB itself recognized was an inadequate record compiled before the Special Master upon which the ASLB was functioning.

Assuming the accuracy and completeness of the information contained in the OI Report, this Memorandum presents the conclu-

sions that I have reached based on review of the OI Report, portions of the PID and the NOV. I do wish to point out that, while I have fully participated in the preparation of this Memorandum and the separate answer of Met Ed Pursuant to 10 CFR § 2.205 which it accompanies, I have had the assistance of counsel in their preparation.

There is one caveat that I wish to note. On or about June 15, 1984, VV was indicted by a Grand Jury of the United States District Court for the Middle District of Pennsylvania under a four-count indictment. Count I indicted VV for violation of Title 18, United States Code, Sections 1001 and 2, for knowingly and willfully using a false writing knowing the same to contain material false statements, namely, that VV submitted as his own work an examination on principles of reactor theory [Section A of VV's FSR quiz] when such examination did not represent VV's own work, but rather had been substantially prepared by another. Count II of that indictment made a similar charge with respect to the submission by VV as his own work of an examination on fuel handling and core perimeters (sic) [Section H of VV's FSR quiz]. VV was convicted of those charges and, on March 12, 1985, sentenced to pay a fine of $2,000 and placed on probation for a period of two years, with a specified condition of probation that he shall perform 400 hours of community service work.

Count III of that indictment charged that, in violation of Title 18, United States Code, Sections 1001 and 2, VV knowingly

and willfully caused a false statement and misrepresentation of a material fact to be made by causing a letter to be sent to the NRC which stated that VV had achieved a score of 89.1% on a requalification program test dealing with principles of reactor theory [Section A] when he had not legitimately obtained that grade. Also, Count IV of that indictment charged that, in violation of Title 18, United States Code, Sections 1001 and 2, on November 15, 1979 VV had knowingly and willfully made a false statement and representation of a material fact by representing to the NRC that during the previous term of his Senior Reactor Operator's license he had satisfactorily completed the Met Ed operator requalification program when in fact he had submitted as his own work written examinations which had been done by another. It is my understanding that Counts III and IV were dismissed.

I do not know whether the transcript of VV's trial will provide relevant information concerning the subject matter of the NOV. Counsel who have been assisting me in the preparation of this Memorandum have been informed that the transcripts of the hearings in that trial have not yet been made available. I intend to review the transcripts of the hearings in that trial when they are available and, if they provide relevant information, to supplement this Memorandum.

Respectfully submitted,

Floyd J. Smith

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MEMORANDUM OF METROPOLITAN EDISON COMPANY ("MET ED")

Accompanying Separate Answer, dated April 15, 1985 Pursuant to 10 CFR 2.205 with respect to Item A of the Notice of Violation and Proposed Imposition of Civil Penalty, dated July 22, 1983 ("NOV").

This memorandum accompanies the Separate Answer, dated April 15, 1985, Pursuant to 10 CFR 2.205 of Metropolitan Edison Company ("Met Ed") with respect to Item A of the Notice of Violation and Proposed Imposition of Civil Penalty, dated July 22, 1983 ("NOV"), of the Office of Inspection and Enforcement ("I&E") of the Nuclear Regulatory Commission ("NRC").

I. Background

A. The background giving rise to the issues herein discussed is summarized in paragraphs 2272-2274 of the Partial Initial Decision, dated July 27, 1982 ("PID"), of the Atomic Safety and Licensing Board ("ASLB") of the NRC, assigned to conduct the proceedings in Docket No. 50-289. Those paragraphs of the PID, quoted in full text, are:

> "2272. VV was the supervisor of operations at TMI-2 as of July 1979 and until he was relieved of that assignment shortly thereafter. O is the person discussed throughout this proceeding as one of the cheaters on the April 1981 NRC licensing examination. The events involved in this incident do not directly relate to the reasons for reopening the evidentiary hearing. The matter is significant in that it relates to management's general response to cheating and the conduct of Gary Miller, who was then TMI station manager and who is now GPU Nuclear's start-up and test director.

"2273. In August 1977, VV who then held a TMI-1 operator license, passed a cross-licensing exam for Unit 2 with an overall grade of 70%. Because of an NRC-required administrative procedure (Administrative Procedure 1006, TMIA Ex. 65) he had to participate in a special portion of the next company requalification program known as Fundamentals and System Review (FSR) in two areas where he scored less than 80%[244]. On his TMI-1 operator's requalification exam in February 1978 he passed, but this time he failed to score the needed 80% on three areas. One weak area was also a weak area on the cross-licensing exam, so he had to train in four FSR sections.

"244/ Under current grading criteria an overall grade of 70% is not enough. The candidate must achieve 70% in each area and 80% overall. See PID ¶ 268, 14 NRC at 476, citing NUREG-0660, Task 1.A.3.

"2274. He didn't attend FSR classes and therefore was given closed-book take home exams which he didn't return. Because of a grace period, it wasn't until July 1, 1979 that he finally faced suspension from licensed duties. By then he was desperate. On the evening of July 1, 1979 he was faced with an absolute deadline, and he was also faced with vacation plans beginning the next day. After work VV induced O to help him. VV (or someone on his behalf) turned in O's work, in O's handwriting, as part of VV's own work. The training department detected the handwriting differences. O was absolved, VV was said to be disciplined for his conduct, and VV was later recertified to the NRC for his license renewal based in part, as we find, upon work done for him by O. The incident raised three issues: Did Licensee deal correctly with O; with VV; and with the NRC in recertifying VV?"

B. VV went on vacation after turning in his FSR quizzes which included O's work in connection with the answers to two portions of the FSR quizzes, one called "Section A: Principles of Reactor Theory" - sometimes also referred to as "Category A", and the other called "Section H: Fuel Handling and Core Parameters", sometimes also referred to as "Category H." While VV's FSR quizzes were being graded by Edward R. Frederick of the TMI Training Department, Frederick noted the apparent handwriting discrepancies.

Frederick called the handwriting discrepancies to the attention of Richard W. Zechman, Supervisor of Training, who asked Frederick to complete the grading. Frederick did so and apparently assigned a grade of 89.1% to the Section A answers and of 64% to the Section H answers. (Frederick, Zechman and others have provided sworn statements that they did not consider the Section A and Section H answers submitted by VV as acceptable.) Apart from the handwriting discrepancies on Section A, VV had failed to achieve the required 80% grades on two other Sections (one of which was Section H). The Met Ed Administrative Procedure ("AP-1006") required that an operator who had failed to achieve an 80% score on two or more sections be relieved of his duties and be assigned full-time to the Training Department for an Accelerated Requalification Program ("ARP"), which requires that the operator achieve 80% or better grades on each of the subjects covered in the ARP. While Floyd was on vacation, he was assigned full-time to the Training Department for an ARP.

C. The central issue raised by the ASLB with respect to this matter was: Did VV's ARP and examination with respect thereto include Section A materials. The ASLB stated in PID Paragraph 2295 that it did not, but the ASLB did not state the basis for that conclusion.

D. Apparently based on the view that VV's ARP (including the ARP exam) did not include Section A materials, the ASLB

assumed that the certification of VV for license renewal was based in part on the grade assigned to Section A of VV's FSR quiz (which included the work of O) and that such certification was a false material statement.

E. Proceeding from that assumption, the ASLB stated its view in paragraphs, 2287 and 2296 of the PID, which are quoted in full text:

> "2287. On August 3, 1979 Gary Miller, the TMI Station Manager, certified to Paul Collins, Chief of the NRC Operator Licensing Branch, that VV had satisfactorily completed the 1978-79 requalification program. TMIA Ex. 74. This certification is the center of an important issue as to whether Mr. Miller had certified VV to the NRC for license renewal knowing that O's improper assistance contributed to the completion of the requalification program by VV. We conclude below that he did and that there is reasonable cause to inquire further whether Mr. Miller, thus the Licensee, has made a false material statement in connection with the recertification of VV."
>
> . . . . .
>
> "2296. On August 3, 1979 Mr. Miller wrote to Mr. Collins of the NRC that on retesting, VV had received 89.1% on Section A, 80.5% on Section G, and, as a result of the accelerated requalification program, a score of 99.8% on the other two sections, E and H. TMIA Ex. 74. These would have been satisfactory scores on all four areas of weakness. The letter did not mention the incident involving O's help to VV. The August 3, letter was, we conclude, a false material statement to the NRC. It was the basis for VV's operator's license renewal."

F. The following is the full text of the letter from Mr. Miller to Mr. Collins referred to in Paragraphs 2287 and 2296 of the PID:

MET-ED GPU

Metropolitan Edison Company
Post Office Box 480
Middletown, Pennsylvania 17057

August 3, 1979

Mr. Paul F. Collins
U. S. Nuclear Regulatory Commission
Office of Nuclear Regulations
Washington, D.C. 2-555

Dear Mr. Collins:

Re: James R. Floyd (SOP-2051-3)

In accordance with Three Mile Island Administrative Procedure 1006, Metropolitan Edison Operator Requalification Program, I hereby certify the satisfactory rating of Mr. Floyd, based upon his completion of an accelerated requalification program in which he achieved a score of 99.8.

By way of background during the 1978-79 requalification year, Mr. Floyd was found to be deficient in four category sections:

Section A: Principles of Reactor Theory
Section E: Safety and Emergency Systems
Section G: Radiation Control
Section H: Fuel Handling and Core Parameters

As a consequence he was required to upgrade these areas in response to Administrative Procedure 1006 and, on retesting, received the following grades:

Section A: 89.1
Section E: 75.6
Section G: 80.5
Section H: 64

Since he received two scores less than 80%, a specifically tailored program was instituted which enabled him to improve in the areas of demonstrated weakness and to attain the level of proficiency indicated by the test score in paragraph 1 above.

Sincerely,

G. P. Miller
Station Manager

GPM/WHP/lcs
cc: M. L. Beers
J. R. Floyd
H. G. Herbein
L. L. Lawyer
R. W. Zechman

G. The ASLB recommended (at Paragraphs 2312-2314 and 2419 (2) of the PID) that the Commission direct the NRC Staff to conduct an investigation into the August 3, 1979 certification of VV to the NRC for operator's license renewal in accordance with the ASLB's discussions at PID Paragraphs 2313-2314. In its Memorandum and Order (CLI-82-31), dated October 14, 1982, the NRC agreed with the ASLB that there was reasonable cause to inquire further into the matter and directed its Office of Investigations ("OI"), which had already commenced its investigation, to provide its findings, when available, to I&E.

H. The ASLB, in PID Paragraphs 2312-2314, had delineated the scope of the Staff investigation that it recommended into what the ASLB characterized as "all of the uncertainties mentioned in the foregoing discussion of the certification for VV's renewal." Under date of March 21, 1983, OI issued a 57 page detailed report with 28 Attachments (many of which are multi-page documents), and a 3-1/2 page summary (collectively, the "OI Report"). It appears that the OI Report carried out the investigation that the ASLB had recommended. Based upon my review of the OI Report, it appears that many of what the ASLB characterized (in the relevant portion of the PID) as "findings," "conclusions," or "holdings" were the product of the "uncertainties" to which the ASLB referred and which caused the ASLB to recommend the investigation. For example, the PID states at Paragraph 2316:

"Messrs. Zechman, Beers and Lawyer are involved only to the extent that Mr. Miller states that they knew and approved of his action (Tr. 24,440 (Miller)), and of course these individuals have not been given any opportunity to explain their role."

I. The OI investigation not only provided such an opportunity to those individuals, but it also provided such an opportunity to Messrs. Dennis J. Boltz, Nelson D. Brown, Thomas Hombach, and William H. Parker, all of whom were involved in some aspects of the matter and who apparently had not previously had such an opportunity. The OI investigation also included interviews with VV, Miller and others. It also provided some additional documentation. Most importantly, the OI investigation has provided an opportunity to gain an appreciation of how (1) the lack in 1979 of an appropriate procedure and process for certification of operator requalification, (2) Miller's failure to ascertain and identify with precision the appropriate course of action to be taken following his investigation of the facts relating to VV's submittal of the work of O as part of the answers to the FSR quiz materials required to be submitted by VV, (3) Miller's inadequate -- and sometimes cryptic - instructions to his subordinates, (4) Miller's lack of sufficient personal follow-through, and (5) the beleagured state of affairs at TMI only a few months after the accident, could give rise to the apparently incorrect assumptions and misunderstandings reflected in the PID.

II. Summary of My Conclusions

A. Since the presentation of the evidentiary basis for the conclusions that I have reached requires a detailed review of many of the documents in the OI Report, I believe it is appropriate to summarize my conclusions here. Those conclusions are:

1. The ASLB's conclusion (in PID Paragraph 2295) that VV was not assigned to an ARP on Section A is not substantiated by the weight of the evidence presented in the OI Report. On the contrary, in their sworn statements that are Attachments to the OI Report, those responsible for developing and administering the ARP for VV in July 1979 have provided sworn statements that VV's ARP included Section A materials and have also identified the basis for that view in the outline of VV's ARP program, as well as in their statements concerning their oral discussions of Section A materials held with VV while he was in the ARP. (The ARP program includes oral discussions with instructors as well as the review of written materials.)

2. Although the PID does not explicitly address the issue of whether VV's written examination at the conclusion of VV's ARP included an examination of VV on Section A materials, it is apparent from the ASLB's PID that the ASLB assumed that it did not. However, in their sworn statements that are Attachments to the OI Report, those responsible for preparing, proctoring, administering and approving the results

of that examination have stated that that ARP examination included Section A materials and have identified the basis for that view in VV's ARP written examination. VV also stated under oath that that written examination included Section A materials and has identified in that examination the basis for that belief.

3. The initial assignment by the Training Department of a grade of 89.1% for Section materials in the FSR quiz submitted by VV on or about July 1, 1979 was probably an appropriate interim action while an investigation was being made as to whether the work submitted by VV on Section A materials in his FSR quiz included work done by O. However, at least by the time that VV admitted, on July 9, 1979, that he had submitted the work of O as part of his Section A FSR quiz answer (if not earlier), that grade should have been expunged from the Training Department records. The OI Report does not address the issue of why that was not done. I am left with the impression that there was no follow-through by the Training Department supervision in correcting the records, and that this was an oversight in a poorly-administered record-keeping process rather than a conscious decision by the Training Department.

4. Although Miller believed that he had directed the Training Department to include Section A materials in VV's

ARP, no written memorandum from Miller to that effect has been found and it may never have existed. However, since, as stated above, key members of the Training Department have provided sworn statements that VV's ARP program and ARP written exam included Section A materials, the absence of such a memorandum does not appear to be significant. There may have been a failure in communication between Miller and Zechman, since, on July 11, 1979, Zechman sent a memorandum to Floyd with a copy to Miller, stating that:

> "In addition to the assignments made as part of your Accelerated Training Program, you are requested to re-do FSR assignment for Category A. This exam is attached for your use. This extra work is at the request of G. P. Miller to insure validity of this section of FSR."

While Zechman was unable to explain the purpose of that directive, his sworn statement was that the re-doing of that FSR assignment would not have been an acceptable means of complying with VV's ARP requirements, and as stated above, that VV's ARP program and written ARP exam did include the Section A materials.

5. Miller's explanation (at pages 27-28 of the OI Report) is that he never gave much thought to the specifics of how VV would address the third (Section A) materials, but that he had called Zechman on the phone and told Zechman to have the Section A materials redone as well. Miller's view

was that the July 11, 1979 memorandum from Zechman to VV was Zechman's way of completing the requirement that Miller had imposed.

6. When Miller received the handwritten July 26, 1979 draft (which had been prepared by Beers of the TMI Training Department) of the certification letter for VV to be sent to the NRC, Miller wrote a note on it addressed to Blake (a lawyer working with Met Ed who has no recollection of ever seeing that note) which stated:

> "I only reference two sections in the make-up. He actually studied 3 sections due to the handwriting problem."

Miller stated (at page 28 of the OI Report) that his secretary put the handwritten draft and note in typewritten form, dated July 27, 1979, and sent them to Blake, John G. Herbein, then a Met Ed Vice President and Miller's supervisor (who also had no recollection of seeing the note or draft letter), and William H. Parker, then TMI Supervisor of Administration. Miller stated (at pages 29-30 of the OI Report) that he "would have assumed that Parker would have followed up on what [Miller] wrote." He also said that the purpose of his note to Blake was (1) to have Blake review the draft of the letter and (2) to tell Parker to finalize the letter. Miller also stated (OI Report, pages 28-29) that it was his belief that Parker inserted the grades for the FSR quizzes in the final version

of the August 3, 1979 letter and that, when Miller was given the letter on August 3, 1979, he "was told the letter was acceptable to sign" and he signed it (OI Report, page 30). He also said (OI Report, page 30) that "when he gave it to Bill Parker [he] depended on him to resolve anybody's comments, and when [Parker] stuck it in front of [him] on August 3rd, [he] probably did not review it to any great extent because the two versus three wasn't critical in [his] mind. That was in the background of the letter."

7. According to Parker's sworn statement, Parker took the draft of the letter that had been prepared by Beers and "put it in paragraph form". He stated that at that time he was unaware of the NRC requirements for relicensing or re-qualification or the specific grade requirements. He was also unaware of what the reference in Miller's note to Blake may mean nor can he explain why the third section [Section A] relating to the handwriting problem was not addressed in preparing the final revision of the letter. When he received the initial draft there were no test scores written and he cannot recall who gave him the scores preparatory to his completing the preparation of the final version of the letter. He doesn't believe that, until the date of his OI interview (on October 18, 1982), he was aware that the 89.1% grade on Section A was on a section containing handwriting other than VV's.

8. By a letter dated August 19, 1982 (OI Report, Attachment 25), Miller was informed that it was the Licensee's position that Miller's August 3, 1979 letter to the NRC certifying the status of VV in Met Ed's training program was incorrect as to the basis for certification and that, given Miller's knowledge of the circumstance at that time, Miller should have been more diligent in providing assurances to himself as to the accuracy of the information in the certification. However, it appears to me that this does not contradict the fact that the weight of the evidence provided by the OI Report supports the view that a proper basis existed on August 3, 1979 for the certification of VV as requalified even though Miller did not personally have all the details to demonstrate that this was the case.

9. Clearly, the statement in the August 3, 1979 letter, which was there stated to be provided by way of background, that VV had received two scores less than 80% in his FSR quizzes was incorrect and should not have been so reported. But if, as the weight of the evidence provided in the OI Report indicates is the case, VV should have been certified on the basis of an ARP written examination that included Section A materials, the procedural and administrative deficiencies that led to that incorrect statement concerning the FSR quiz results appear to assume a greatly diminished significance. I suggest that that view is supported by the summary in the OI

Report of an OI investigator's interview of Don H. Beckham, Chief of the Operator Licensing Branch ("OLB"), Office of Nuclear Reactor Regulation ("NRR"), of the NRC. The OI Report states (at page 49):

> "Beckham opined that [Met Ed's] AP-1006 appeared to require that the licensee merely provide certification of the license holder's satisfactory rating on the ARP and not the background information contained in the letter; however, he felt that since that information was included, it should have been accurate and truthful. Beckham stated that the foundation of an effective regulatory program is based upon the agency's ability to trust and rely upon the accuracy of the information it receives from licensees."

10. Two other items deserve brief mention in this summary and are more fully dealt with below:

(a) The ASLB discusses testimony by Miller (PID Paragraphs 2300 and 2302) in a way that suggests that Miller was stating that the sole basis for certifying VV on Section A materials was an oral examinations of VV. This appears to me to be a questionable reading of that testimony. See, e.g., Miller's testimony at Tr. 24,434 where Miller stated:

> "In addition to that, in the [written ARP] exam we looked at earlier with the 99.8 there were questions from Section A."

(b) The ASLB discusses (at PID Paragraph 2304) the Comments submitted by Miller's counsel to the ASLB and attributes to page 13 of those Comments the statement that

> "...the sole purpose of the August 3 letter was to certify that VV attained a satisfactory rating on his accelerated retraining tests (only Sections E and H)" (emphasis supplied)

The statement in the Comments does not contain the underscored material. The actual statement in the Comments was:

> "...the sole purpose of the August 3 letter was to certify that VV, who had been in an accelerated requalification program, had obtained a satisfactory rating on his accelerated requalification tests."

Thus, the quoted statement in the PID is not an accurate paraphrase of the actual statement in the Comments in that the Comments did not say that the accelerated requalification program was limited to Section E and H materials.

11. My review of the OI Report leads me to the following conclusions:

(a) The statement in the third paragraph of the August 3, 1979 letter that VV had received a score on Section A of 89.1% [on his FSR quiz] was incorrect, and, in that sense "false;"*

(b) The statement in the fourth paragraph of that letter that:

---

*The statement in that same paragraph of the August 3, 1979 letter that VV had received a score on Section H of 64% [on his FSR quiz] was also incorrect since O's work was also included in the answer to VV's FSR quiz on Section H. Presumably because the 64% was a failing grade and it was not questioned that VV's ARP had included Section H, the ASLB paid little attention to the statement in the letter concerning Section H.

"Since he [VV] received two scores less than 80%, a specifically tailored program was instituted..."

could have reasonably implied that that was the only reason for assigning VV to the ARP. Upon that basis, that statement was inaccurate and incomplete; and

(c) The weight of the evidence produced in the OI Report does not support the view that the statement in the first paragraph of that letter was inaccurate.

12. I am unable to evaluate the issue of whether the incorrect and incomplete statements referred to in subparagraphs (a) and (b) of paragraph 11 are material, since that requires a judgment as to what the NRC would have done if it had been furnished with accurate and complete information: However, as set forth below, there are some indications that, in the 1979 time frame when the letter was submitted (as distinguished from the present time) the incorrect and incomplete statement may not have been regarded as material.

13. I find it difficult to believe that the inaccurate and incomplete statements referred to in paragraphs (a) and (b), even if material, are sufficient to substantiate the charge in Item A of the NOV that the statements made in the August 3, 1979 letter constitute "willful" material false statements.

III. Detailed Review

A. The Basis for Recertification of VV.

The ASLB PID states:

> "This certification was based in part upon the score achieved by VV with O's assistance" [presumably in VV's answer to Section A of the FSR quizzes] (PID at ¶ 2048.)
>
> "...VV was later recertified to the NRC for his license renewal based in part, as we find, upon work done for him by O" (PID at ¶ 2274).
>
> "This certification is the center of an important issue as to whether Mr. Miller had certified VV to the NRC for license renewal knowing that O's improper assistance contributed to the completion of the requalification program by VV. We conclude that he did and that there is reasonable cause to inquire further whether Mr. Miller, thus the Licensee, has made a false material statement in connection with the recertification of VV." (PID at ¶ 2287).

Comments

(1) These conclusions appear to be based upon the ASLB's assumptions, in Paragraph 2295 of the PID, that VV was not assigned to the accelerated requalification program ("ARP") on Section A and that the written test on the completion of the ARP which VV took did not cover Section A materials.

(2) As previously noted, the ASLB recognized (PID § 2316) that the record before it was incomplete and recommended that the NRC direct its staff to undertake the investigation which was conducted by OI. That investigation by OI resulted in the OI Report which discloses the following:

Nuclear

GPU Nuclear Corporation
100 Interpace Parkway
Parsippany, New Jersey 07054-1149
(201) 263-6500
TELEX 136-482
Writer's Direct Dial Number:

April 15, 1985
5211-85-2044

Mr. James M. Taylor, Director
Office of Inspection and Enforcement
Nuclear Regulatory Commission
Washington, D. C. 20555

Re: Three Mile Island Nuclear Station, Units 1 and 2
("TMI-1" and "TMI-2")
Operating License Nos. DPR-50 and DPR-73
Dockets Nos. 50-289 and 50-320
Partial Answer Pursuant to 10 CFR 2.201 to Notice
of Violation and Proposed Imposition of Civil Penalty,
dated July 22, 1983 ("NOV")

Dear Sir:

This partial answer to the Notice of Violation and Proposed Imposition of Civil Penalty, dated July 22, 1983 ("NOV") is submitted by GPU Nuclear Corporation ("GPUN") which is the current Licensee of TMI-1 and TMI-2. This partial answer is directed to the requirements of the NOV which require the Licensee to submit

> "a written statement or explanation: (of) . . . (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which have been taken to avoid further violations; and (5) the date when full compliance will be achieved"

The balance of the requirements of the NOV requiring

> "a written statement or explanation: (of) . . . (1) admission or denial of the alleged violation; and (2) the reasons for the violation"

is being provided in a contemporaneous written statement submitted by Metropolitan Edison Company ("Met Ed"), the licensee of TMI-1 and TMI-2 at the time that the events addressed in the NOV took place. This Partial Answer and the Met-Ed response are being submitted by April 16, 1985, pursuant to an extension of time to that date granted by J. M. Taylor on April 2, 1985.

Item A

(3) The Corrective Steps Which Have Been Taken and the Results Achieved

The matters discussed in Item A of the NOV were the subject of scrutiny in one aspect of the TMI-1 Restart proceeding, and are discussed in the Partial Initial Decision ("PID"), dated July 27, 1982, of the Atomic Safety and Licensing Board ("ASLB") in Docket No. 50-289. They were also investigated by the Commission's Office of Investigations as discussed in its Report, dated March 21, 1983 (the "OI Report"). In addition, subsequent to the issuance of the PID, GPUN retained Fred Speaker, Esq., a member of the law firm of Pepper, Hamilton & Sheetz, to make an independent investigation and to furnish a report with respect to these matters. Mr. Speaker was subsequently requested to make a further investigation and to render a further report. Copies of the Speaker Reports have previously been furnished to the NRC Staff.

In the PID, the operator who submitted work prepared by another operator in completion of a take-home examination is identified as "VV", the other operator who prepared such work is identified as "O", and the TMI Station Manager is identified as Mr. Gary Miller. Those identifications are used in this letter.

The Corrective Steps Taken Are:

(a) The actions taken by Metropolitan Edison Company against VV in 1979 are discussed in paragraphs 2277-2286 of the PID and were found appropriate by the ASLB. Following VV's testimony during the Reopened Restart Proceeding, additional action was taken with respect to VV as set forth in R. C. Arnold memorandum to J. R. Floyd, dated March 4, 1983, copy attached, because of the variance between what he told G. Miller in 1979 and his hearing testimony. On April 22, 1983, VV resigned as an employee of GPUN and since that time has not been employed by any GPU System Company.

(b) In an Order dated August 3, 1982, the ASLB added an additional condition to its PID requiring that any participation by Gary Miller in the start-up, testing or operation of TMI-1 be under the direct supervision of an appropriately qualified official of GPUN. By a letter, dated August 19, 1982, the then President of GPUN advised Mr. Miller that he would be transferred from GPUN to an affiliated public utility company. (A copy of that letter is Attachment 25 to the OI Report.) Mr. Miller was subsequently so transferred and is not involved in GPUN activities.

(c) As noted in Paragraph 2059 of the PID, Licensee recognized that it could be legitimately criticized for not having a formal process and a written

procedure for operator qualification certification and committed itself to establish such a procedure.

TMI-1 Administrative Procedures 1058, "Requirements for Certification of Candidates for NRC Operator Licenses and Instructor Certifications," and TMI-2 Administrative Procedure 4210-ADM-2610.01 (formerly AP-1006), "Requirements for Certification of Candidates for NRC Operator Licenses," to correct this deficiency and carry out this commitment were prepared and were implemented on February 3, 1982 and September 1, 1982, respectively.

In addition, through letters, and interviews with employees and senior management, Licensee repeatedly emphasized to all elements of its organization the need for rigorous compliance with all requirements.

The detailed investigation of these matters reflected (a) in the proceeding before the Special Master, (b) in the OI and Speaker Reports, and (c) your Notice of Violation, and the media attention they have received has, of course, underscored for all elements of Licensee's organization the importance of such compliance.

(4) The Corrective Steps Which Have Been Taken To Avoid Further Violation

The response to (3) is also applicable here. In addition, Licensee has established a policy to remind its personnel regularly and periodically of the necessity for full compliance. In addition, as discussed in our response to Item B below, the Licensee had undertaken to deter cheating and to detect cheating if such should occur. These Licensee's procedures were the subject of extensive review during the recent Reopened Proceeding on training, and in the Licensing Board Response to CLI-85-2, the Board found that GPUN had established "(s)tringent security measures." In addition, the emphasis on open channels of communication between Licensee management and staff, a process also endorsed by the Licensing Board in their April 11, 1985 Response to CLI-85-2, will provide further assurance of rigorous regulatory compliance.

(5) The Date When Full Compliance Will Be Achieved

Licensee believes that full compliance has been achieved.

Item B

(3) The Corrective Steps Which Have Been Taken and the Results Achieved

At the commencement of the NRC's investigation of cheating on its

April 1981 examination, operators O and W were suspended from their duties and subsequently their employment was terminated. Investigations were conducted by Licensee as well as the NRC to determine whether there had been cheating on Licensee examinations as well as the NRC exams. The investigations included interviews of all operators to determine if there were other known instances of cheating and to emphasize to them Licensee's policy that cheating on examinations was not permissible under any circumstances. The results of these investigations were included in the reopened restart hearing presided over by the Special Master. Licensee's investigation determined that proctoring on some of the "Category T" examinations was inadequate. Therefore, all individuals who had not received a grade of 90% or more on the initial examination in April of 1980 were required to be reexamined.

Actions regarding other individuals, determined by the ASLB to have been involved in cheating on licensee administered examinations, were taken consistent with recommendations of the ASLB.

In addition, upon receipt of the PID in the summer of 1982, Licensee undertook an extensive internal effort with the Training Department management as well as Operations personnel to assure that the causes of the cheating, including most particularly the "attitudes" involved, were understood and their responsibility to help ensure that proper attitudes existed and that any improper attitudes are detected and corrected.

Licensee also undertook an assessment of other operator attitudes (RHR study) and followed through on results of that study most recently reported to the Commission on December 31, 1984.

In addition, Licensee has accepted all the conditions in this area required by the ASLB's Partial Initial Decision and has taken the following steps:

a. The Director of Training and Education issued procedure 6200-ADM-2600.01, October 20, 1981, pertaining to control and administration of examinations. This procedure was followed by a supplemental procedure for Operator Training, 6210-ADM-2604.01, December 1, 1982, which contained provisions for review of all examinations within +- 2% of passing for consistency in grading and for reviews of a sample of examinations for evidence of collusion. In accordance with an ASLB requirement, this latter procedure has been submitted to and approved by the NRC.

b. An Instructor qualification program for Operator Training instructors was implemented in December 1982. This procedure, 6210-ADM-2610.02, was also submitted to and approved by the NRC.

c. An instructor evaluation program, which had been conducted informally, was formalized and implemented on January 12, 1983. This procedure, 6210-ADM-2631.02, meets a condition of the ASLB.

d. An independent audit was conducted by Data-Design Laboratories to assess the adequacy of Operator Training and Radiological Controls Technician Training. A verification of the efficacy of the operator training and testing program will be achieved by another independent audit to meet a condition of the ASLB.

e. Licensee developed and implemented thorough procedures for the certification of operators for license renewal and of candidates for NRC licensing examinations. Assignment of a full-time administrative assistant to the Operator Training Section to track training requirements has also helped to ensure that certification requirements are met.

f. Licensee's senior management issued letters to, and conducted interviews with, management and operational personnel to emphasize Licensee's intolerance of cheating and to reinforce the significance of, and need for, examinations conducted by the NRC and Licensee. Interviews of all licensed operators to keep these issues squarely before them have been continued on an annual basis by the TMI-1 Vice President.

Licensee believes that such corrective steps have been successful in instilling proper attitudes and an awareness throughout Licensee's organization of the importance of preventing further violations.

(4) The Corrective Steps Which Have Been Taken To Avoid Further Violations

The steps discussed under (3) are designed to avoid further violations. Licensee has continued to improve its training program and evaluations to assure operators are fully prepared for their duties and the related licensing examinations and thus eliminate the potential incentives for cheating. In addition, the ASLB Partial Initial Decision imposes a two-year post TMI-1 restart probation period and, during that period, the second independent audit referred to in 3(d) above will be completed.

(5) The Date When Full Compliance Will Be Achieve

Licensee believes that full compliance has been achieved.

Very truly yours,

P. R. Clark

P. R. Clark
President

Sworn to and Subscribed
Before me this 15th day
of April, 1985

Veronica A Gearhart
Notary Public

VERONICA A GEARHART
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires May 10, 1987

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

OCT 21 1985

Docket Nos. 50-289, 50-320
Licensee Nos. DPR-50, DPR -73
EA 82-124

GPU Nuclear Corporation
ATTN: Mr. P. R. Clark, President
100 Interpace Parkway
Parsippany, New Jersey 07054

Gentlemen:

This refers to three letters dated April 15, 1985 from GPU Nuclear Corporation and Metropolitan Edison Company (Met-Ed) to the Director, Office of Inspection and Enforcement, in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you with our letter dated July 22, 1983.

Your April 15, 1985 response referred us to an April 15, 1985 response from Met-Ed, the licensee at the time the violations specified in the Notice of Violation took place, for admission or denial of the violations. I have carefully considered that response and have reached the conclusions set forth below.

In its April 15, 1985 response, Met-Ed admitted the violation set forth in Item B of the Notice of Violation. Met-Ed further stated its belief that although violations occurred, they were not as set forth in Item A of the Notice of Violation. Notwithstanding this view, Met-Ed paid the proposed civil penalty but requested modification of Item A to eliminate the characterization of "willful" and mitigation of the civil penalty on the basis that the violation in Item A was not willful.

The basis for the violation cited in Item A of the Notice of Violation was an August 3, 1979 letter from the licensee concerning the certification of James R. Floyd and a November 15, 1979 license renewal application from Floyd. Met-Ed focused on the statements in the August 3, 1979 letter regarding the Section A test score, the number of areas of demonstrated weakness reported, and on whether Floyd was actually retested on Category A materials. Met-Ed admits that the August 3, 1979 letter contained false information in that it identified only two of the three weak areas in the Operator Requalification Program that required additional training but argues that the false statement was not significant because Floyd was recertified after successful completion of an Accelerated Requalification Program. This response misses the point in the citation that the recitation of the score as 89.1 on Section A implied that Floyd had done well on that section and did not indicate that he achieved that score by using someone else's work. The citation stated that the omission in the August 3 and November 15, 1979 letters of any reference to the cheating which occurred was material in that the staff would have required additional evidence of retesting on those sections on which Floyd cheated. Therefore, Met-Ed has not convinced us that the violation was not as set forth in Item A of the Notice of Violation.

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Met-Ed suggests that the information in the OI Report shows that the submission of this false information resulted from delegation of the task of drafting the letter without adequate instruction and also from shortcomings on the part of the Station Manager in reviewing the letter for accuracy and completeness. Met-Ed argues that the submission was not intentionally made and, therefore, was not "willful".

The NRC staff does not agree with the conclusions that Met-Ed draws from the facts contained in the OI Report. Based on all the information developed in the OI report, it is clear that the Station Manager was aware that Floyd had cheated on the FSR quizzes and had not, in fact, achieved the score of 89.1 using his own work. Thus, when the Station Manager signed the letter he knew that the information in it was false. Furthermore, Floyd knew when he signed the November 15, 1979 letter that he had cheated on some part of his operator requalification program. A false statement need not have been made with the intent to deceive to be considered a willful material false statement. If the person making the statement knew at the time it was submitted that it was false, then the statement is a willful material false statement. The staff has concluded that the characterization of the violation as willful was appropriate.

Regarding mitigation of the civil penalty, the NRC finds no basis for such action. The violation involved a willful material false statement by senior plant managers. As stated in the NRC's July 22, 1983 letter to the licensee, the purpose of the civil penalty is to emphasize the need for complete and accurate communication with the Commission.

For the above reasons, I have determined that the characterization of the violation as willful in Item A of the July 22, 1983 Notice of Violation is correct and that mitigation of the proposed civil penalty paid on behalf of GPU Nuclear Corporation by Met-Ed on April 15, 1985 is not 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 enclosure will be placed in the NRC's Public Document Room.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Copy to:
F. J. Smith, Met-Ed

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

SEP 25 1985

Docket Nos. 50-315/50-316
License Nos. DPR-58/DPR-74
EA 85-94

American Electric Power Service
Corporation
Indiana and Michigan Electric Company
ATTN: Mr. John E. Dolan,
Vice Chairman, Engineering and
Construction
1 Riverside Plaza
Columbus, OH 43216

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC INSPECTION REPORT NOS. 50-315/85018; 50-316/85019)

This refers to the special safeguards inspection conducted on June 18 and 19, 1985 at the Donald C. Cook Plant, Units 1 and 2, Bridgman, Michigan. The results of this inspection were discussed on July 1, 1985 during an Enforcement Conference between yourself and others of your staff and Mr. James G. Keppler and others of the NRC staff.

The inspection revealed three examples of failures to adequately control access to vital areas within your facility. The duration of these violations ranged from several days to perhaps several years. In addition, you failed to notify the NRC of a reportable physical security event. This is of particular concern to the NRC because although your security procedures required classification of the event as reportable, upper level management erroneously concluded that the event was not reportable. These violations reflect a failure on your part to fully implement and maintain in effect the provisions of your NRC-approved Physical Security Plan.

To emphasize the importance of maintaining adequate access controls into vital areas of the Donald C. Cook facility, as well as reporting such losses of security effectiveness to the NRC, 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 cumulative amount of One Hundred Thousand Dollars ($100,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the violations described in the enclosed Notice have been categorized as Severity Level III violations. The base value of a civil penalty for a Severity Level III violation is $50,000. The escalation and mitigation factors in the Enforcement Policy were considered. Due to the multiple examples and

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RETURN RECEIPT REQUESTED

length of time during which degraded vital area barriers existed without proper compensatory measures, the base civil penalty for Violation A could be escalated by 100 percent. However, because of the extensiveness of your corrective actions, described at the July 1, 1985 Enforcement Conference no escalation of the penalty has been proposed. Your extensive and comprehensive corrective actions included: (1) revising training and procedures such that security officers are now required to check VA barriers for penetrations; (2) informing all contractor and licensee personnel on the importance of maintaining barrier integrity; (3) labelling VA penetrations to stress security importance; (4) extensive reviews of VA barriers for possible penetrations; and (5) development of a procedure so that future modifications/changes to VA barriers are reviewed by cognizant licensee plant employees and reported to security. No adjustment to the base civil penalty amount of $50,000 for Violation B, which dealt with failure to report a security event, has been deemed appropriate.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. You should place all Safeguards Information as defined in 10 CFR 73.21 only in enclosures, so that your letter may be placed in the Public Document Room. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

The material enclosed contain Safeguards Information as defined by 10 CFR 73.21 and its disclosure to unauthorized individuals is prohibited by Section 147 of the Atomic Energy Act of 1954, as amended. Therefore, with the exception of the cover letter this material will not be placed in the 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,

James G. Keppler
Regional Administrator

Enclosures:
1. Notice of Violation and Proposed Imposition of Civil Penalties
2. Inspection Report Nos. 50-315/85018(DRSS); 50-316/85019(DRSS) (UNCLASSIFIED SAFEGUARDS INFORMATION)

INDIANA & MICHIGAN ELECTRIC COMPANY

P.O. BOX 16631
COLUMBUS, OHIO 43216

October 25, 1985
AEP:NRC:0846-O

Donald C. Cook Nuclear Plant Unit Nos. 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
INSPECTION REPORT NOS. 50-315/85018; 50-316/85019 AND NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

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

Dear Mr. Taylor:

This letter responds to Mr. J. G. Keppler's letter of September 25, 1985, addressing the Special Safeguards Inspection conducted on June 18 and 19, 1985, and the subsequent Enforcement Conference on July 1, 1985.

Our response to your Notice of Violation and Proposed Imposition of Civil Penalty pursuant to 10 CFR 2.201 is contained in the enclosure to this letter. This material contains Safeguards Information as defined by 10 CFR 73.21 and its disclosure to unauthorized individuals is prohibited by Section 147 of the Atomic Energy Act of 1954, as amended. Therefore, with the exception of the cover letter, this enclosure should not be placed in the Public Documents Room.

It is our opinion that the fine imposed for not reporting a security event is severe, given that it resulted from an erroneous and judgmental evaluation of the circumstance and not a circumvention of reporting requirements. When the situation was identified by security, compensatory measures were promptly taken, and the event was reported to the Assistant Plant Manager. The decision concerning reportability was based on a review of the situation by the D. C. Cook Nuclear Plant management.

Plant management judged that since the Cook Plant Unit 1 reactor vessel was completely defueled, and the equipment in the vital area was not required, the degradation of this vital area barrier did not constitute a danger to the health and safety of the public. The basis for this judgment was discussed with the Plant Chief Security Supervisor at the time it was made. It was

agreed that the situation did not constitute a significant threat or a major loss of physical security effectiveness of safeguards as required by 10 CFR 73.71(c) and, therefore, not reportable. The condition was documented resulting in identification of the noncompliance by NRC resident personnel.

Enclosed is the check payable to the Treasurer of the United States in the amount of one hundred thousand dollars ($100,000). This payment is for the total civil penalty imposed in accordance with 10 CFR 2.201 and 10 CFR Part 2, Appendix C.

Please sign and return the security document certification of receipt form SI-3.

Very truly yours,

M. P. Alexich
Vice President

edg

Enclosure

cc: John E. Dolan, w/o encl.
W. G. Smith, Jr. - Bridgman, w/o encl.
George Bruchmann, w/o encl.
R. C. Callen, w/o encl.
G. Charnoff, w/o encl.
NRC Resident Inspector - Bridgman, w/o encl.
James G. Keppler, NRC Region III, w/encl.

STATE OF OHIO

COUNTY OF FRANKLIN

M. P. Alexich, being duly sworn, deposes and says that he is the Vice President of Licensee Indiana & Michigan Electric Company, that he has read the foregoing response to NRC Inspection Report 50-315/85018; 50-316/85019 and knows the contents thereof; and that said contents are true to the best of his knowledge and belief.

M. P. Alexich

Subscribed and sworn to before me this 15 day of December, 1985.

(Notary Public)

NOTARY PUBLIC
MY COMMISSION EXPIRES

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

SEP 26 1985

Docket No. 50-312
EA 85-103

Sacramento Municipal Utility District
P. O. Box 15830
Sacramento, California 95813

Attention: R. J. Rodriguez
Executive Director for Nuclear Operations

Gentlemen:

This refers to the special inspection conducted by Messrs. J. L. Crews, J. H. Eckhardt, and other members of the NRC staff during the period June 23, 1985 through August 9, 1985, of activities authorized by NRC License No. DPR-54. The findings of the inspection were transmitted to you by letter dated August 26, 1985, along with Inspection Report No. 50-312/85-19. An Enforcement Conference was held at the Region V office on September 6, 1985, with you and other members of your staff. Based on the results of this inspection and as discussed during the enforcement conference, it appears that certain of your licensed activities were not conducted in full compliance with NRC requirements.

Violation A in the enclosed Notice involves your failure to establish design and installation control measures to ensure the integrity of the Quality Class I, Seismic Class I portion of the nitrogen supply and vent header system. The violation was identified as a result of the June 23, 1985 discovery of a crack in the reactor coolant system's high point vent line which led to a 17 gpm non-isolable primary coolant leak. That discovery prompted a walkdown and inspection in July 1985 of 349 safety-related pipe supports. Violation B.1 in the enclosed Notice describes the two seismic supports which were not installed in accordance with design drawings issued in 1983 during modifications of the reactor coolant system's 3/4 inch high point vent lines on the "A" and "B" loops. As a result, the code allowable limits for a seismic design basis event were exceeded. Violation B.2 involves 223 other safety-related supports which were not installed in accordance with design drawings.

The violations described in the attached Notice reflect serious deficiencies in the control of engineering design, installation, and quality control inspections. Many of these program deficiencies resulted in failures to identify hardware deficiencies some of which appear to have existed since 1974. They were not detected by your QA/QC audits and surveillance activities which, if properly planned and implemented, should have detected them.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

It should be noted that findings of a similar nature in recent NRC inspections underscore our concerns regarding the control of engineering design (e.g., ineffective control of the design and installation of auxiliary feedwater flow transmitters discussed in Inspection Report No. 50-312/84-15), and modification and inspection activities (e.g., inadequate modification and ineffective QC inspections associated with the Nuclear Service Electric Building discussed in Inspection Report No. 50-312/85-01), which we have previously brought to your attention in our correspondence and meetings with you over the past several months.

We recognize that substantial steps to improve your QA/QC program have been taken by you, commencing in 1984 with the commissioning of a comprehensive consultant study of all aspects of your nuclear operations. The recommendations of this study have been ranked by priority, responsibility assigned for each, and implementation has proceeded on a priority basis. Short and long-term actions by you relating to the high point vent piping crack are described in your letter to this office dated August 6, 1985. The actions that you have initiated since the beginning of this year in response to your consultant's study, together with those actions described in your letter of August 6, 1985 should, if fully implemented, substantially address the root causes of problems identified in your past performance relating to design control, installation, and quality control/assurance activities.

To emphasize the need to improve your engineering design, installation, and quality control inspections, 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 Fifty Thousand Dollars ($50,000) for the violations described in the enclosed Notice. The violations have been categorized in the aggregate as a Severity Level III problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985). In assessing the civil penalty we have taken into account the corrective actions and no adjustment to the civil penalty has been deemed appropriate.

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

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

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

Sincerely,

John B. Martin
Regional Administrator

NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY

Sacramento Municipal Utility District
Rancho Seco Nuclear Generating Station

Docket No. 50-312
License No. DPR-54
EA 85-103

During an NRC inspection conducted during the period of June 23 - August 9, 1985, violations of NRC requirements relative to engineering designs, modifications and quality assurance activities were identified by the licensee as a result of evaluations and actions taken in response to a crack in the high point vent line connected to the reactor coolant system. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to section 234 of the Atomic Energy Act of 1954, as amended, ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

A. 10 CFR 50, Appendix B, Criterion III states "Measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in §50.2 and as specified in the license application, for those structures, systems, and components to which the appendix applies are correctly translated into specifications, drawings, procedures and instructions."

10 CFR 50, Appendix B, Criterion V requires that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

Contrary to the above, in 1974, the design basis for the Quality Class I, Seismic Class I portion of the nitrogen supply and reactor coolant vent systems which connect to a one inch reactor coolant system vent located on the high point of the "B" hot leg was not correctly translated into design specifications and drawings in that the drawings and design specifications provided inadequate support for the nitrogen supply and vent header system. On October 7, 1981, after reanalysis of the design basis of the system, Bechtel Power Corporation advised the licensee that a spool piece should be put in during plant operations and that additional supports should be added to the "B" vent and purge line system. When the licensee went to make modifications to the system in 1983, although the drawings required installation of the spool piece, the Engineering Change Notice for the modifications did not require its installation and the piece was not installed. These deficiencies resulted in a 17 gallon per minute non-isolable primary coolant leak on June 23, 1985.

B. 10 CFR 50, Appendix B, Criterion V requires that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

1. Contrary to the above, the design drawings referenced in Engineering Change Notice ECN-A-2934 issued in 1983 for the construction of the reactor coolant systems 3/4 inch high point vent lines on the "A" and "B" loops specified that seismic supports shall be in place between two specific valves used for system isolation. However, these supports were not installed in accordance with ECN-A-2934 as required, as was discovered in a June 1985 post I&E Bulletin 79-14 walkdown of the system, which resulted in the code allowable limits for a seismic design basis event being exceeded.

2. Contrary to the above, as of July 1985, about 223 other safety-related supports (identified in the licensee's August 6, 1985 letter) were not installed in accordance with instructions, procedures or drawings.

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

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

Pursuant to the provisions of 10 CFR 2.201, Sacramento Municipal Utility District 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 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 that have been taken and the results achieved, (4) the corrective steps which will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Sacramento Municipal Utility District may pay the civil penalty by letter addressed to the Director, Office of Inspection and Enforcement, with a check, draft, or money order payable to the Treasurer of the United States in the amount of Fifty Thousand Dollars ($50,000) or may protest imposition of the civil penalty in whole or in part by a written answer addressed to the Director, Office of Inspection and Enforcement. Should Sacramento Municipal Utility District 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 Sacramento Municipal Utility District 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 addressed in Section V.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 parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Sacramento Municipal Utility District'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, remitted, or mitigated, may be collected by civil action pursuant to section 234c of the Act, 42 U.S.C. 2282.

J. B. Martin
Regional Administrator

Dated at Walnut Creek, California
this 26 day of September 1985

SMUD
SACRAMENTO MUNICIPAL UTILITY DISTRICT ☐ 6201 S Street, P.O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

RJR 85-524

October 25, 1985

DIRECTOR
OFFICE OF INSPECTION AND ENFORCEMENT
U S NUCLEAR REGULATORY COMMISSION
WASHINGTON DC 20555

DOCKET 50-312
LICENSE NO. DPR-54
EA 85-103

On September 26, 1985, the Nuclear Regulatory Commisson, Region V, issued a Notice of Violation and Proposed Imposition of Civil Penalty to the Sacramento Municipal Utility District (the District).

Attachment 1 to this letter is the District's response to Region V concerns identified in the Notice of Violation.

The District does not protest the imposition of the civil penalty. A check in the amount of $50,000 (fifty thousand dollars) is attached as payment of penalty.

If you have any questions, please contact Rich Myers of my licensing staff at (916) 732-6023.

R. J. RODRIGUEZ
ASSISTANT GENERAL MANAGER,
NUCLEAR

Attachments

cc: J. B. Martin, NRC, Region V

Sworn to and subscribed before me this 25th day of October, 1985.

Patricia K. Geisler
Notary Public

PATRICIA K. GEISLER
NOTARY PUBLIC—CALIFORNIA
PRINCIPAL OFFICE IN
SACRAMENTO COUNTY
My Commission Expires February 16, 1988

ATTACHMENT 1

RESPONSE TO NOTICE OF VIOLATION

VIOLATION A

10 CFR 50, Appendix B, Criterion III states "Measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in Paragraph 50.2 and as specified in the license application, for those structures, systems, and components to which the appendix applies are correctly translated into specifications, drawings, procedures and instructions."

10 CFR 50, Appendix B, Criterion V requires that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

Contrary to the above, in 1974, the design basis for the Quality Class I, Seismic Class I portion of the nitrogen supply and reactor coolant vent systems which connect to a one inch reactor coolant system vent located on the high point of the "B" hot leg was not correctly translated into design specifications and drawings in that the drawings and design specifications provided inadequate support for the nitrogen supply and vent header system. On October 7, 1981, after reanalysis of the design basis of the system, Bechtel Power Corporation advised the licensee that a spool piece should be put in during plant operations and that additional supports should be added to the "B" vent and purge line system. When the licensee went to make modifications to the system in 1983, although the drawings required installation of the spool piece, the Engineering Change Notice for the modifications did not require its installation and the piece was not installed. These deficiencies resulted in a 17 gallon per minute non-isolable primary coolant leak on June 23, 1985.

DISTRICT RESPONSE TO VIOLATION A

Admission Or Denial Of The Alleged Violation

The District agrees that the violation occurred as stated and does not protest the imposition of civil penalty.

Reasons For The Violation

The District has determined the root cause of Violation A to be a breakdown in the control of plant configuration changes. This breakdown applied primarily to design activities. In addition, insufficient construction practices and inspection activities were secondary contributors to this event.

Corrective Steps Which Have Been Taken And Results Achieved

The appropriate design drawings have been corrected to show the spool piece and appropriate pipe supports. These items have been properly installed and inspected. In addition, repairs and inspections have been completed to restore, and assure, the integrity of associated piping.

Corrective Steps Which Will Be Taken To Avoid Further Violations

The District is currently reviewing and revising its design, construction, and inspection procedures to ensure that the modification process is adequately addressed. The District recognizes that procedures alone do not assure compliance. Therefore, additional training has been provided to design personnel on the proper use of applicable procedures to ensure their awareness of design and configuration control requirements.

Date When Full Compliance Will Be Achieved

The review and revision of procedures and associated training is a continuing process. The District, however, believes that full compliance with respect to this violation has been achieved with the completion of repairs to the "B" high point vent system.

VIOLATION B

10 CFR 50, Appendix B, Criterion V requires that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

1. Contrary to the above, the design drawings referenced in Engineering Change Notice ECN-A-2934 issued in 1983 for the construction of the reactor coolant systems three-fourth inch high point vent lines on the "A" and "B" loops specified that seismic supports shall be in place between two specific valves used for system isolation. However, these supports were not installed in accordance with ECN-A-2934 as required, as was discovered in a June 1985 post I&E Bulletin 79-14 walkdown of the system, which resulted in the code allowable limits for a seismic design basis event being exceeded.

2. Contrary to the above, as of July 1985, about 223 other safety-related supports (identified in the licensee's August 6, 1985 letter) were not installed in accordance with instructions, procedures or drawings.

DISTRICT RESPONSE TO VIOLATION B

Admission Or Denial Of The Alleged Violation

The District agrees that the violation occurred as stated and does not protest the imposition of civil penalty.

Reasons For The Violation

The District has determined that the root cause of Violation B, like Violation A, is a breakdown in the control of plant configuration changes. Specifically, insufficient construction practices and inspection activities contributed to this violation.

Corrective Steps Which Have Been Taken And The Results Achieved

1. The missing supports identified on ECN-A-2934 have been installed and inspected.

2. The District has evaluated the balance of the nonconforming supports identified during the walkdown. Many of the supports were found to be acceptable as installed. Drawing changes have been initiated to reflect the as-built condition of these supports. The other supports have been reworked and inspected to restore the desired design margins and ensure proper installation.

Corrective Steps Which Will Be Taken To Avoid Further Violations

As mentioned in the response to Violation A, the District is currently reviewing and revising its design, construction and inspection procedures to ensure that the modification process is adequately addressed. The District recognizes that procedures alone do not assure compliance. Therefore, additional training has been provided to construction and inspection personnel with respect to proper installation and inspection.

Date When Full Compliance Will Be Achieved

The review and revision of procedures and associated training is a continuing process.

The District has completed the installation of the missing supports, rework of the appropriate nonconforming supports and support installation and rework inspections. Full compliance will be achieved with completion in January, 1986 of the drawing changes to incorporate the as-built conditions of those supports found to be acceptable as installed.

I.B. REACTOR LICENSEES, SEVERITY LEVEL III VIOLATIONS,

NO CIVIL PENALTY

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

NOV 15 1985

Docket Nos. 50-424 and 50-425
License Nos. CPPR-108 and CPPR-109
EA 85-117

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

Gentlemen:

SUBJECT: NOTICE OF VIOLATION - NRC INVESTIGATION REPORT NO. 2-83-005

This refers to the Enforcement Conference held in the Region II Office on September 25, 1985, between members of the NRC staff and members of your staff. The Enforcement Conference was held to discuss the findings of an investigation conducted by the NRC Office of Investigations from May 19 through July 9, 1983, concerning welding Quality Control (QC) activities authorized by NRC Construction Permit Nos. CPPR-108 and CPPR-109 at your Vogtle Electric Generating Plant (VEGP). The investigation was initiated as a result of allegations made to the NRC Senior Resident Inspector by a confidential source.

The investigation was based primarily on interviews of QC personnel and revealed that a manager for Pullman Power Products Company (PPP), Georgia Power Company's (GPC) contractor for installation of piping and piping supports at VEGP, had intimidated QC personnel who, through the line management, reported to him administratively. The QC personnel had responsibilities for inspection of the PPP installation work. Although the investigation and subsequent inspections did not identify evidence that QC inspections were compromised, the intimidation of QC inspectors by the manager still constitutes a violation of Criterion I of Appendix B to 10 CFR Part 50. This criterion 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 to identify quality problems.

To emphasize the need for you to assure that the GPC quality assurance program is being properly executed, and that QC personnel are not discouraged from vigorously implementing the quality assurance program, I have been authorized by the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation. The violation has been categorized as a Severity Level III violation in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, 47 FR 9987 (March 9, 1982), the Enforcement Policy in effect at the time of the violation. Normally, a civil

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

penalty is considered for a Severity Level III violation. However, after consultation with the Director, Office of Inspection and Enforcement, I have decided that a civil penalty will not be proposed in this case because of your thorough investigation and your prompt corrective actions to resolve this matter. Those actions included replacement of the manager charged with intimidation, implementation of methods for QC inspectors to express their concerns (such as suggestion boxes, a concerns program, and biweekly meetings), improved training for QC and other personnel, and apprising QC personnel as to previously misunderstood salary administration policies. We have also taken into consideration your good enforcement history since this incident occurred. You have described the corrective actions which you have taken in your letter dated July 23, 1984, to Region II in response to Inspection Reports 50-424/84-05, 50-425/84-05, 50-424/84-36, and 50-425/84-36 and during the Enforcement Conference and the NRC has determined that these actions are acceptable. Therefore, no response to the enclosed Notice is required.

A summary description of the Enforcement Conference is included as an enclosure to this letter. For record purposes, this letter and its enclosures have been assigned inspection report numbers 50-424/85-49 and 50-425/85-36.

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

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

Sincerely,

John A. Olshinski for

J. Nelson Grace
Regional Administrator

Enclosures:
1. Notice of Violation
2. Enforcement Conference Summary Report Nos. 50-424/85-49 and 50-425/85-36

cc w/encls:
R. E. Conway, Senior Vice President
Nuclear Power
D. O. Foster, Vice President
and General Manager Vogtle Project
H. H. Gregory, III, General
Manager, Vogtle Nuclear Construction

(cc w/encls cont'd - see page 3)

NOTICE OF VIOLATION

Georgia Power Company
Vogtle Electric Generating Plant

Docket Nos. 50-424 and 50-425
License Nos. CPPR-108 and CPPR-109
EA 85-117

Based on the results of an investigation conducted by the NRC Office of Investigations (OI Report No. 2-83-003) at the Vogtle Electric Generating Plant (VEGP) Waynesboro, Georgia, from May 19 - July 9, 1983, a violation of NRC requirements was identified. The investigation revealed that a Pullman Power Products Company (PPP) manager at VEGP had intimidated quality control (QC) personnel who reported to him administratively.

The violation is set forth below in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, 47 FR 9987 (March 9, 1982), the Enforcement Policy in effect at the time of the violation.

10 CFR Part 50, Appendix B, Criterion I, states that construction permit holders are responsible for the establishment and execution of a quality assurance program. Criterion I further states that persons performing quality assurance functions shall have sufficient organizational freedom to identify quality problems; initiate, recommend, or provide solutions; and verify implementation of solutions.

Contrary to the above, the Georgia Power Company Quality Assurance Program did not provide quality control inspectors sufficient organizational freedom to identify problems in that a contractor manager, during his employment at the VEGP from September 1979 through June 1983, made remarks which threatened QC personnel with dismissal, transfer, and the withholding of salary increases. The QC personnel, who reported administratively to the contractor manager, perceived his threats as intimidation regarding their freedom to perform their quality assurance functions. These QC personnel were responsible for inspection of work on piping and supports at the VEGP.

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

Dated at Atlanta, Georgia
this 15 day of November 1985

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

DEC 18 1985

Docket No. 50-482
License No. NPF-42
EA 85-127

Kansas Gas and Electric Company
ATTN: Glenn L. Koester
Vice President - Nuclear
P. O. Box 208
Wichita, Kansas 67201

Gentlemen:

SUBJECT: NOTICE OF VIOLATION (NRC INSPECTION REPORT NO. 50-482/85-35)

This refers to the inspection conducted during the period September 1 through October 4, 1985, of activities authorized by NRC Operating License No. NPF-42, for the Wolf Creek Generating Station, Burlington, Kansas. A number of violations of NRC requirements were identified during this inspection. An enforcement conference was not deemed necessary because of the corrective measures that we understand your staff has taken.

Violation A involves centrifugal charging pump A (CCP-A) which was taken out of service for maintenance on August 27, 1985. The pump was declared operable on August 30, 1985 after maintenance was completed even though the discharge isolation valve for CCP-A was still closed. This resulted in a technical specification action statement being exceeded by 25 hours. You discovered the violation on August 31, 1985 and reported it to the NRC Senior Resident Inspector on the next working day (September 3, 1985).

Violation B involves the failure of a worker to observe protective clothing requirements of a radiation work permit. Violation C involves the violation of a technical specification requirement to establish a fire watch patrol or increase containment temperature monitoring frequency whenever fire detection instrumentation in certain zones is out of service. Violation D addresses a failure to follow installation criteria for various conduits. Violation E involves failure to follow housekeeping requirements.

In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), Violation A described in the enclosed Notice has been classified as a Severity Level III violation. Normally, a civil penalty is considered for a Severity Level III violation. However, after consultation with the Director, Office of Inspection and Enforcement, I have decided that a civil penalty will not be proposed in this case because your staff promptly identified and reported the violation to the NRC and unusually prompt and extensive corrective action was taken to prevent recurrence.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

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

Sincerely,

Original signed by:
Robert D. Martin
Robert D. Martin
Regional Administrator

Enclosure:
Notice of Violation

Kansas Gas and Electric Company
ATTN: Gene P. Rathbun, Manager
of Licensing
P. O. Box 208
Wichita, Kansas 67201

Forrest Rhodes, Plant Superintendent
Wolf Creek Generating Station
P. O. Box 309
Burlington, Kansas 66839

Kansas Radiation Control Program Director

NOTICE OF VIOLATION

Kansas Gas and Electric Company
Wolf Creek Generating Station

Docket No. 50-482
License No. NPF-42
EA 85-127

During an NRC inspection conducted during the period September 1 through October 4, 1985, five violations of NRC requirements were identified. The most significant violation involved the failure to adhere to technical specification requirements regarding operable emergency core cooling systems. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the violations are listed below:

A. Technical Specification 3.5.2 requires that "two independent emergency core cooling systems (ECCSs) subsystems shall be operable with each subsystem comprised of:

a. One operable centrifugal charging pump,

b. One operable safety injection pump,

c. One operable RHR heat exchanger,

d. One operable RHR pump, and

e. An operable flow path capable . . . ."

The action statement for Technical Specification 3.5.2 states: "with one ECCS subsystem inoperable, restore the inoperable subsystem to operable status within 72 hours or be in at least hot standby within the next 6 hours and in hot shutdown within the following 6 hours."

Contrary to the above, on August 31, 1985, it was determined that centrifugal charging pump A had been inoperable for 97 hours without the required action statement being implemented.

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

B. 10 CFR Part 50, Appendix B, Criterion V states: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings . . . and shall be accomplished in accordance with these instructions, procedures, or drawings. . . ."

Administrative Procedure (ADM) 03-101, Revision 4, "Radiation Work Permit Program," has been established in accordance with 10 CFR Part 50, Appendix B, Criterion V and Section 3.5 states, in part, "Each individual using a radiation work permit (RWP) is responsible to comply with this procedure and applicable instructions from the health physics group."

Contrary to the above, on August 30, 1985, a radiation worker was observed entering a radiologically controlled work area without donning the protective clothing (cotton liners, rubber gloves, plastic shoe covers, and rubber shoe covers) delineated in RWP 850143, which had been established for the controlled area by the health physics group.

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

C. Technical Specification 3.3.3.8, requires that the fire detection instrumentation for Fire Detection Zone 201 be operable.

The action statement for Technical Specification 3.3.3.8 requires that when the fire detection instrument for Fire Detection Zone 201 (located inside containment) is inoperable, a fire watch patrol must be established to inspect Fire Zone 201 at least once per 8 hours or the containment air temperature must be monitored at least once per hour at the locations listed in Technical Specification 4.6.1.5.

Contrary to the above, on August 13, 1985, with the fire detection instrument for Fire Zone 201 inoperable, containment air temperature was not monitored at least once per 8 hours between the hours of 0700 and 1459, nor was a fire watch patrol established to monitor Fire Zone 201.

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

D. 10 CFR Part 50, Appendix B, Criterion V, states: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings . . . and shall be accomplished in accordance with these instructions, procedures, or drawings. . . ."

Design Drawing E-IR 8900, Revision 3, "Raceway Notes, Symbols, and Details," has been implemented in accordance with 10 CFR Part 50, Appendix B, Criterion V.

Design Drawing E-IR 8900, Revision 3, provides the methods that are acceptable for installation of conduit at the Wolf Creek Generating Station.

Contrary to the above, on September 26, 1985, flexible conduit 1U1276, running between the rigid conduit mounted on the room wall and terminal box TV-AB05 mounted on the main steam isolation valve (MSIV) AB HV-20, was tied with a plastic stay strap to an air line (approximately 3/4" diameter) going to the same valve. Also, flexible conduit 1U1279, going to MSIV AB HV-17, was tied with a plastic stay strap to the conduit connector (at the valve) for conduit 1U1277. This method of installing flexible conduit is not shown in Drawing E-IR 8900 as an acceptable installation method.

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

E. 10 CFR Part 50, Appendix B, Criterion V, states: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings . . . and shall be accomplished in accordance with these instructions, procedures, or drawings. . . ."

1. ADM 13-102, Revision 4, "Control of Combustible Materials," has been established in accordance with 10 CFR Part 50, Appendix B, Criterion V.

Section 5.1 of ADM 13-102 states "The person requiring the use of combustible materials in excess of the amounts specified in Table 1 of this procedure will obtain a permit for the handling, use, and/or storage of those materials from the fire protection specialist or his designee. Storage must comply with Section 3.1.2."

Table 1 to ADM 13-102 states that the maximum quantities of transient combustible solids allowed without a permit will be (at or below) 10 cubic feet and 100 pounds.

Contrary to the above, on September 25, 1985, 19 cardboard boxes, which is in excess of the amount specified in Table 1 of Section 5.1 of ADM 13-102, were observed to be unattended and stored on the north end of the auxiliary building on the 2026' level without the use of a combustible materials permit.

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

2. ADM 01-034, Revision 7, "Housekeeping and Cleanliness Control," has been established in accordance with 10 CFR Part 50, Appendix B, Criterion V. The following are excerpts from ADM 01-034:

Section 6.2.3: "Oily mops and wiping rags will be stored in noncombustible containers when not in use."

Section 6.1.4: "Rags, paper, and other debris shall be placed in suitable waste containers. If radiologically contaminated items are involved, the decontamination and/or disposal will be done under the direction of the health physics group."

Section 6.2.2.1: "Combustible waste material will be disposed of at least once per working shift in noncombustible covered waste receptacles."

Section 6.2.2.8: "Oily rags and waste, in small amounts, shall be disposed of in portable metal waste cans with a self-closing cover."

Contrary to the above, on September 26, 1985, the following conditions were observed in the auxiliary building:

a. A metal trash container (flapper lid type), located in Room 1509 on the 2047' level and adjacent to main steam isolation valve AB HV-20, was overflowing with combustible trash to the extent that the flapper lid was being held open by the trash and a paper towel was on the floor beside the trash container.

b. In Room 1412 on the 2026' level and adjacent to main feedwater isolation valve AE FV-041, approximately 20 oil-soaked rags (approximately 1' by 1' in size) were lying on the floor.

c. On the 1974' level adjacent to Column AJ-A6 in the north-south corridor on the east side of the building, a trash barrel (50 gallon open top drum) was approximately one-half full of mostly combustible material.

d. On the 2026' level adjacent to Column AJ-A13, a trash barrel (50 gallon open top drum) was approximately two-thirds full of mostly combustible material.

e. On the 2000' level adjacent to Column A13 at the south end of the north-south corridor, an unattended pile of approximately 10 rags (approximately 1' by 1' each) was on the floor beside an overturned maintenance cart.

f. On the 2047' level adjacent to Column AJ-A9, a trash barrel (50 gallon open top drum) was approximately three-fourths full of mostly combustible material.

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

Pursuant to the provisions of 10 CFR 2.201, Kansas Gas and Electric 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 reason for the violations if admitted, (2) the corrective steps which have been taken and the results achieved, (3) the corrective steps which will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert D. Martin
Regional Administrator

Dated at Arlington, Texas,
this 18 day of December 1985.

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

NOV 15 1985

Docket No. 50-271
License No. DRP-28
EA 85-119

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: NOTICE OF VIOLATION
(NRC Inspection No. 50-271/85-31)

This refers to the special inspection conducted by a Region I staff member on September 24-26, 1985 at the Vermont Yankee Nuclear Power Station, Vernon, Vermont, to review the circumstances associated with a violation of the physical security plan involving the undetected and unauthorized entry of a contractor employee into the site protected area. The violation occurred on September 20, 1985 and was discovered by another contractor employee who was authorized access to the protected area. During the inspection another violation of the physical security plan was identified. The inspection report was forwarded to you on October 11, 1985. On October 21, 1985 an enforcement conference was conducted with you and members of your staff to discuss the violations, their causes and your corrective actions.

The violations have been classified in the aggregate as a Severity Level III problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985). Normally, a civil penalty is considered for a Severity Level III violation or problem. However, we have decided not to issue a civil penalty in this case because: (1) one violation was identified by a contractor employee, which is indicative of an effective security awareness program, and promptly reported to the NRC; (2) your prior enforcement history in the security area has been good as evidenced by Category 1 ratings for security during the last three SALP rating periods; and (3) your corrective actions, including the establishment of a task force to assess guard functions, implementing procedures, and the overall effectiveness of the security program, as described at the enforcement conference, were acceptable. Nonetheless, we emphasize that any similar security degradations in the future may result in additional enforcement action.

During the enforcement conference, you indicated consideration of expanding the list of participants in the security program task force to include independent - knowledgeable members of other organizations. The NRC views that consideration as a valuable option. In addition, your security organization managers need to assess program implementation on a day-to-day

basis and increase their awareness and sensitivity to security matters, especially when plant conditions are changed. Please address these issues in your response to the enclosed Notice of Violation.

You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. In your response, you should place all Safeguards Information (as defined in 10 CFR 73.21) and all commercial or financial information (as defined in 10 CFR 9.5(a)(4)) in enclosures, so as to allow your letter (without enclosures) to be placed in the Public Document Room.

The enclosed Notice contains details of your security program that have been determined to be exempt from public disclosure in accordance with 10 CFR 73.21 (Safeguards Information). Therefore, those portions of the Notice will not be placed in the Public Document Room and will receive limited distribution.

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.

Thomas E. Murley
Regional Administrator

Enclosure: Notice of Violation

cc w/encl:
R. W. Capstick, Licensing Engineer
W. F. Conway, President and Chief Executive Officer
J. P. Pelletier, Plant Manager
Donald Hunter, Vice President
Cort Richardson, Vermont Public Interest Research Group, Inc.
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
State of New Hampshire
State of Vermont

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

NOV 21 1985

Docket Nos. 50-280 and 50-281
License Nos. DPR-32 and DPR-37
EA 85-123

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

Gentlemen:

SUBJECT: NOTICE OF VIOLATION
(INSPECTION REPORT NOS. 50-280/85-30 AND 50-281/85-30)

This refers to the routine security inspection conducted by a member of the Region II staff on September 9-12, 1985, at the Surry Power Station which included a review of the circumstances of a security event identified and reported by the licensee. The concerns regarding the event were discussed with you and members of your staff in an enforcement conference held at the Region II office on October 22, 1985.

On September 6, 1985, a licensee employee, who had previously been authorized unescorted access to the protected area and vital areas, entered the protected area through an open vehicle gate without being searched and without being issued a security photo identification badge. The employee remained in the protected area for a period of more than three hours before he recognized his badge was missing and notified the security force. The violation resulted from a failure by a member of the security force to adequately control access at the protected area vehicle gate.

In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the violation described in the enclosed Notice has been classified at a Severity Level III. Normally, a civil penalty is considered for a Severity Level III violation. However, after consultation with the Director, Office of Inspection and Enforcement, I have decided that a civil penalty will not be proposed in this case because of your (1) identification and prompt reporting and (2) prior good performance in the area of concern.

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

In accordance with 10 CFR 2.790(d) and 10 CFR 73.21, safeguards activities and security measures are exempt from public disclosure; therefore, the enclosures to this letter, with the exception of the report cover page which presents a nonexempt summary, will not be placed in NRC's Public Document Room.

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

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

Sincerely,

John A. Olshinski for

J. Nelson Grace
Regional Administrator

Enclosures:
1. Notice of Violation
   (Safeguards Information)
2. Inspection Report Nos. 50-280/85-30
   and 50-281/85-30
   (Safeguards Information)

cc w/encls:
R. J. Hardwick, Jr., Manager - Nuclear
Programs and Licensing
R. F. Saunders, Station Manager

II.A. MATERIALS LICENSEES, CIVIL PENALTIES AND ORDERS

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

May 10, 1985

General License (10 CFR 31.5)
EA 85-47

American Can Company
ATTN: Mr. T. G. Rogers
Senior Counsel
Environmental and Energy Law
American Lane
P.O. Box 3610
Greenwich, CT 06836

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION NO. 999-90033/85005 (DRSS))

This refers to a special safety inspection conducted by Mr. G. L. Shear on March 6, 1985, of activities at the American Can Company in Neenah, Wisconsin, authorized by NRC General License (10 CFR 31.5). The report of the inspection was forwarded to you on April 8, 1985. The results of the inspection were discussed on April 5, 1985 during an enforcement conference in the Region III office between you and Mr. W. L. Axelson and others of the NRC staff.

The inspection showed, among other things, that licensee management failed to ensure that licensed radioactive material in an unrestricted area was secured from unauthorized removal. This led to the loss or theft of a 25 millicurie americium-241 sealed source in a NDC Systems Model 103 RHL nuclear gauge.

Your April 23, 1985 letter to me confirmed your implementation of actions that were discussed between you and Mr. Darrel G. Wiedeman of my office on April 8, 1985 and were also confirmed in my letter to you dated April 9, 1985. Your letter restated your difference of opinion with our interpretation of 10 CFR 31.5(c)(3) as discussed at the April 5, 1985 enforcement conference. While we appreciate your position, the general license granted to American Can Company under 10 CFR 31.5 does not permit you to remove, install, or test the gauges as you suggest.

To emphasize the importance of adequate oversight and control of licensed material, 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 Five Hundred Dollars ($500) for the violation described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the violation described in the enclosed Notice has been categorized at a Severity Level III. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustment has been deemed appropriate.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

You are required to respond to this letter and should follow the instructions specified in the attached Notice when preparing your response. You should give particular attention to those actions designed to ensure continuing compliance with NRC requirements. In your response you should describe the management procedures which will be implemented to ensure proper controls over licensed radioactive materials at all times. 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 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 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,

James G. Keppler
Regional Administrator

Enclosure: Notice of
Violation and Proposed
Imposition of Civil Penalty

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

American Can Company
Neenah, Wisconsin

General License
(10 CFR 31.5)
EA 85-47

As a result of a special safety inspection conducted at the American Can Company in Neenah, Wisconsin on March 6, 1985 it appears that violations of NRC requirements have occurred. The most significant violation relates to the licensee's failure to ensure that licensed material in an unrestricted area was secured from unauthorized removal. This led to the loss or theft of a 25 millicurie americium-241 sealed source in a NDC Systems Model 103 RHL nuclear gauge.

In order to emphasize the responsibility of licensees to ensure that gauges obtained under a general license are removed and transferred in accordance with regulatory requirements, NRC proposes to impose a civil penalty in the amount of Five Hundred Dollars. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), 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 in Section I below:

I. VIOLATIONS ASSESSED A CIVIL PENALTY

A. 10 CFR 31.5(c)(3) requires that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to the general license shall assure that testing and installation as well as removal from installation involving the radioactive materials, its shielding or containment, are performed in accordance with the instructions provided by the labels or by a person holding a specific license pursuant to 10 CFR Parts 30 and 32 or from an Agreement State to perform such activities.

Contrary to the above, leak tests were performed on February 28, 1983, February 3, 1984, and December 20, 1984, by individuals not authorized to perform such tests. In addition, from 1974 to January 1985 the licensee installed and removed NDC System Model 103 RHL nuclear gauges containing 25 millicuries of americium-241 in a sealed source even though it did not hold a specific license and the instructions on the label of the gauge did not permit it to do so. Specific examples are: (1) a gauge was removed the week of December 23, 1984, and (2) a gauge was installed on January 22, 1985.

B. 10 CFR 31.5(c)(8) requires that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to a general license shall transfer or dispose of the device containing byproduct material only by transfer to persons holding a specific license pursuant to 10 CFR Parts 30 and 32 or from an Agreement State to receive the device.

Contrary to the above, a gauge was removed from service the week of December 23, 1984, and on February 28, 1985 the licensee was unable to determine the whereabouts of the gauge or produce records showing transfer or disposal of the gauge. The licensee presumes the gauge is lost or stolen.

These violations have been evaluated as a Severity Level III problem (Supplement VI).

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

II. VIOLATION NOT ASSESSED CIVIL PENALTY

10 CFR 31.5(c)(2) requires that persons possessing byproduct material in a device pursuant to the general license shall assure that the device is tested for leakage of radioactive material at no longer than six month intervals or at such other intervals as are specified in the label.

Contrary to the above, tests were conducted for leakage of radioactive material from gauges on February 28, 1983, February 3, 1984 and on December 20, 1984 at intervals exceeding the six month requirement.

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

Pursuant to the provisions of 10 CFR 2.201, American Can Company 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, 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. If an adequate reply is not received within the time specified in this Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other actions as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, American Can Company may pay the civil penalty in the amount of Five Hundred Dollars ($500) or may protest imposition of the civil penalty in whole or in part by a written answer. Should American Can 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 American Can 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 V.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 parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. American Can 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 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 G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 10th day of May 1985.

COVINGTON & BURLING
1201 PENNSYLVANIA AVENUE, N. W.
P. O. BOX 7566
WASHINGTON, D. C. 20044

(202) 662-6000
WRITER'S DIRECT DIAL NUMBER

(202) 662-5304

June 24, 1985

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

Re: American Can Company, EA 85-47

Dear Mr. Taylor:

On May 10, 1985, the NRC forwarded a Notice of Violation and Proposed Imposition of Civil Penalty to the American Can Company. I enclose: (1) a Response to the Notice of Violation, and (2) a Protest of the Imposition of a Civil Penalty and a Request for Remission or Mitigation. These documents are submitted in accordance with 10 CFR §§ 2.201, and 2.205.

If you should have any questions, please feel free to contact me.

Sincerely,

Richard A. Meserve

/wfs

cc: James G. Keppler

BEFORE THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

In re American Can Company Neenah, Wisconsin	)	General License (10 CFR § 31.5) EA 85-47

RESPONSE TO NOTICE OF VIOLATION

On May 10, 1985, the Regional Administrator issued a "Notice of Violation and Proposed Imposition of Civil Penalty" directed at the American Can Company ("American Can"). The notice concerns certain alleged violations by American Can relating to its use of certain gauges containing byproduct material. American Can Company hereby responds to the notice, as required by 10 CFR § 2.201.[1/]

American Can has purchased ten gauges from NDC Systems in Duarte, California, for use in its facility in Neenah, Wisconsin. The gauges enable the measurement of the thickness of polyethylene coatings and flexible packaging that are produced at the facility, thereby assuring uniform and high-quality products. Each of the gauges employs 25 millicuries of Americium-241 in a sealed source. The notice asserts that American Can violated three of the regulatory provisions relating to the use of such gauges.

1/ On June 5, 1985, the Director of the Enforcement Staff granted an extension of time to June 24, 1985, within which American Can could respond to the notice.

I. Alleged Violation of 10 CFR § 31.5(c)(3)

The notice asserts that American Can violated 10 CFR § 31.5(c)(3), which concerns testing, installation, servicing, and removal of gauges. In particular, it alleges that persons who did not have specific licensing authority installed and removed the gauges from production lines and were involved in the conduct of leak tests. American Can denies this alleged violation. Further, although American Can does not dispute the factual statements in the notice, it believes the statements to be incomplete.

The regulatory section at issue provides that any person who uses a gauge covered by a general license:

> "Shall assure that the tests required by paragraph (c)(2) of this section and other testing, installation, servicing, and removal from installation involving the radioactive materials, its shielding or containments, are performed:
>
> (i) In accordance with the instructions provided by the labels; or
>
> (ii) By a person holding a specific license pursuant to Parts 30 and 32 of this chapter or from an Agreement State to perform such activities."

10 CFR § 31.5(c)(3). The label that is attached to each gauge sets out, in addition to certain factual information, several statements that are relevant here:

> "The receipt, possession, use and transfer of this device are subject to a general license or equivalent and the regulations of the U.S. NRC or a state with which the NRC has entered into an agreement for the exercise of regulatory authority."

> "The sealed radioactive source contained in this device shall be tested at installation and every six months thereafter for leakage of radioactive material, except that devices containing Krypton 85 need not be so tested."
>
> "Maintenance, tests or other service involving the radioactive material, its shielding and containment shall be performed by persons holding a specific radioactive material license to provide these services."

In the circumstances presented, American Can believes its activities in connection with the gauges were authorized.

A. Installation and Removal of Gauges.

Although the label indicates that the "use" of the gauges is "subject to a general license or equivalent" and to certain regulations, it includes no specific guidance concerning installation and removal. The information provided to American Can from the gauges' manufacturer, however, clearly states that each gauge is "portable" and may properly be moved about by the user. Indeed, American Can is informed that the gauges in its possession were licensed by the State of California (an Agreement State) under terms that authorize users to remove and install the gauge without a specific license.

The brochure setting out the specifications of the gauges includes the following information:

> "Licensing: The NDC probe qualifies under State of California General License No. GL1933-70 which is recognized by the federal Nuclear Regulatory Commission. Because the NDC probe uses a comparatively small radioactive source, the conditions of this license allow the user to use the unit in a portable manner, for instance, to move

the probe from line to line. No special certification of operators is required."

Exhibit 1. American Can's use of the gauges was fully consistent with this specific advice.

In fact, in response to a recent inquiry from American Can, the President of NDC Systems stated that "California's licensing authority expressly contemplated the portable nature of the gauge" and that a State official recently "confirmed the fact that the portability feature of the gauge is incorporated by reference in the licenses."[1/] Exhibit 2. In short, American Can's installation and removal were authorized by the Agreement State that licensed the gauges.

Under the circumstances, American Can believes its installation and removal of the gauges were in accord with the label, because such actions were consistent with a "general license or equivalent." It thus asserts that its actions in installing and removing the gauges does not constitute a violation of 10 CFR § 31.5(c)(3).

B. Leak Tests.

The notice states that leak tests were performed by individuals who were not authorized to perform such tests. In American Can's view, the notice fails to reflect adequately the limited role of American Can in such leak testing and the circumstances under which these activities took place.

1/ Indeed, as indicated by the text from the user's manual that is part of Exhibit 2, the gauges have been designed and tested for use as portable instruments.

NDC Systems offers a "Leak Test Kit" for sale to the purchasers of its gauges. Exhibit 3. The kit, which has a purchase price of $50, includes a chemical, which is to be mixed with water, and a swab, which is to be moistened with the solution and then used to wipe the surface of the gauge. The instructions with the kit state that the swab is to be returned to NDC Systems for analysis. There is no indication in the instructions that any special licensing is necessary to undertake the wiping of the source.

A leak test should properly be seen as involving two activities: the collection of a sample (the swab), and the subsequent analysis of that sample. American Can did collect the samples, but it did not perform analyses. Indeed, the analyses were routinely performed by NDC Systems, which is authorized to conduct such work. American Can believes its limited role in the leak testing is consistent with the regulatory scheme.

The wiping of the sources is a simple task that involves no special knowledge or expertise whatsoever. On the other hand, the analytical procedures for analyzing the samples do require special skills, expertise, and care that reasonably might be subject to detailed regulatory supervision. Because the label on the gauge properly should be construed in the light of other representations from the manufacturer -- including in particular the availability of the leak test kit and the absence of instructions in the kit concerning special licensing -- American Can's limited role in the leak testing should be

seen to be in accord with the label. If so, its actions do not constitute violations of 10 CFR § 31.5(c)(3).

C. Corrective Steps.

Without admitting that the removal, installation, or testing of gauges constituted violations, American Can has taken actions to assure that the past practices are halted until the resolution of this matter. If the NRC ultimately concludes that these actions are not authorized, American Can will implement the corrective steps on a permanent basis.

American Can is currently negotiating a contract with LFE Corporation of Waltham, Massachusetts, whose personnel are specifically licensed to install, remove and test gauges, to perform these services in American Can's Neenah facility. In the interim, these tasks are performed by PROMAC, Inc. of Michigan City, Indiana, whose personnel are similarly licensed. Further, instructions have been issued that any installation, removal or testing of gauges is not to be undertaken by American Can employees. Only the electricians at the Neenah facility were ever authorized to move gauges, and the foreman of electricians has emphasized that this work is no longer authorized in each monthly safety meeting. Finally, specific management employees (Messrs. Don VandenBranden and Emil Bigalke) have been given the responsibility for assuring that the installation, removal and testing of the gauges is undertaken solely by persons who are licensed to perform such services.

II. Alleged Violation of 10 CFR § 31.5(c)(8)

The notice asserts that American Can violated 10 CFR § 31.5(c)(8), which provides that a person shall transfer a gauge only to a person holding a specific license authorizing the receipt of the device. Because American Can is unable to determine the whereabouts of one gauge despite extensive efforts, it can neither admit nor deny under oath whether an unauthorized transfer of that gauge took place. American Can assumes, however, that such an unauthorized transfer did occur.

The circumstances surrounding the loss were fully disclosed when American Can notified the NRC that one of the gauges was missing. The circumstances were discussed further at the enforcement conference in the offices of Region III on April 5, 1985. In brief summary, one of NDC Systems gauges was removed from its location on a production line during the repair and maintenance of the line. When American Can employees subsequently commenced the reassembly of the line, the gauge could not be located. American Can promptly notified the NRC and conducted extensive efforts to locate the gauge. See Protest of the Imposition of a Civil Penalty and Motion for Remission or Mitigation, at 3-4. These efforts proved unsuccessful.

American Can has taken a number of steps to prevent any recurrence of this episode. The employees in the facility have been instructed that any handling of the gauges is prohibited. If a gauge is removed from its position on a production line (by a specially licensed person), it is immediately placed in a

designated storage area and maintained there under lock and key. A specific management employee (Mr. Emil Bigalke) has been given the responsibility for assuring the whereabouts of all gauges. On a regular basis (every seven days), the employee or his designee verifies the location of the gauges.

American Can believes that these actions provide reasonable assurance against any future unauthorized transfer of a gauge.

III. Alleged Violation of 10 CFR § 31.5(c)(2)

The notice asserts that American Can violated 10 CFR § 31.5(c)(2), which provides that any person who possesses or uses a gauge shall assure that tests for leakage of radioactive material are conducted at no longer than six-month intervals. The notice provides that such tests were conducted on February 28, 1983, February 3, 1984, and on December 20, 1984 -- intervals that exceed the six-month requirement.

American Can admits that it committed this violation. Although leak tests were regularly performed, such tests were inadvertently not performed at the required intervals.

A specific management employee (Mr. Don VandenBranden) has been assigned the responsibility for assuring that the necessary testing is performed at the required interval. American Can believes the designation of responsibility will prevent any future violations.[1/]

1/ As noted above, American Can is negotiating a contract with LFE Corporation to perform the leak tests.

CONCLUSION

In light of the foregoing, American Can respectfully requests that the NRC withdraw its notice of violation of 10 CFR §§ 31.5(c)(3).

M. J. Anderson
Vice President, Manufacturing
Flexible Packaging
American Can Company
American Lane
Greenwich, Connecticut 06836

Subscribed and sworn to on this ___ day of _____.

Notary Public

ELIZABETH A. REIS
NOTARY PUBLIC
MY COMMISSION EXPIRES MARCH 31, 1988

My Commission expires: _____

Counsel:

Dorothy G. Rogers, Esq.
American Can Company
American Lane
Greenwich, Connecticut 06836
(203) 552-3368

Richard A. Meserve, Esq.
Covington & Burling
1201 Pennsylvania Avenue, N.W.
P.O. Box 7566
Washington, D.C. 20044
(202) 662-5304

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

NOV 0 4 1985

General Licensee
EA 85-47

American Can Company
ATTN: Mr. M. J. Anderson
Vice President-Manufacturing
Flexible Packaging
American Lane
Greenwich, CT 06836

Gentlemen:

This acknowledges receipt of your letter dated June 24, 1985 in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you with our letter dated May 10, 1985. The Notice of Violation sets out violations identified during a special NRC safety inspection conducted at your Neenah, Wisconsin facility on March 6, 1985. Two of the violations (testing, installation, and removal; and unauthorized transfer) identified during this inspection were of significant concern to the NRC. To emphasize the importance of your staff conducting activities in full compliance with Commission regulations, a civil penalty of $500 was proposed.

We have carefully considered your response to violation I.A. in which you denied that a violation of 10 CFR 31.5(c)(3) occurred. 10 CFR 31.5(c)(3) requires that installation and removal of generally licensed gauges, and tests of such gauges, be performed in accordance with the labels or by a person holding a specific license. For the reasons given in the Appendix attached to the enclosed Order, we have concluded that a portion of Violation I.A. (installation and removal) should be withdrawn and the remaining portion (leak testing) should be reclassified as a Severity Level IV violation with no assessed civil penalty. The civil penalty has been adjusted for these violations accordingly. Violation I.B. (unauthorized transfer) and Violation II concerning a failure to leak test at proper intervals remain unchanged.

We have also given careful consideration to your request for mitigation if the violations and proposed civil penalty are formally imposed and have concluded, as discussed in the Appendix, that further mitigation is not warranted. We hereby serve on American Can Company the enclosed Order Imposing a Civil Monetary Penalty in the amount of Two Hundred and Fifty Dollars ($250). We will review the effectiveness of your corrective actions during a subsequent inspection.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

Sincerely,

James M. Taylor, Director
Office of Inspection & Enforcement

Enclosure: Order Imposing Civil Monetary Penalty with Appendix, Evaluation & Conclusions

cc: Timothy G. Rogers, Esq.
Richard A. Meserve, Esq.
State of California
NDC Systems, Inc.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	General License
AMERICAN CAN COMPANY	)	(10 CFR 31.5)
(Neenah, Wisconsin Plant)	)	EA 85-47

ORDER IMPOSING CIVIL MONETARY PENALTY

I

American Can Company (the "licensee") is authorized under the general license granted in 10 CFR 31.5 by the Nuclear Regulatory Commission to perform activities in connection with licensed radioactive material in accordance with the conditions specified therein.

II

A special inspection of the licensee's activities was conducted on March 6, 1985. The results of this inspection indicated that the licensee had not conducted its activities in full compliance with Commission requirements and the conditions of its license. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated May 10, 1985. The Notice states the nature of the violations, the requirements of the Commission regulations that were violated, and the amount of the civil penalty proposed for each violation. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalty on June 24, 1985.

III

Upon consideration of the licensee's response and the statements of fact, explanation, and arguments regarding rescission or mitigation contained therein, as set forth in the Appendix to this Order, the Director, Office of Inspection and Enforcement, has determined that a portion of Violation I.A should be withdrawn. This portion dealt with the installation and removal of a generally licensed gauge by unauthorized individuals. The portion of the violation involving the licensee allowing unauthorized individuals to conduct leak testing has been reclassified as a Severity Level IV violation with no assessed civil penalty. The NRC has reviewed the circumstances of Violation I.B. and determined that the violation occurred as stated and that a penalty is appropriate for this violation and should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1984, 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 Two Hundred Fifty Dollars ($250.00) 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, 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, USNRC, Washington, D.C. 20555. A copy of the hearing request shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555 and to the Regional Administrator, Region III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137. 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 a hearing shall be:

(a) whether the licensee was in violation of the Commission's requirements as set forth in Violation I.B. of the Notice of Violation and Proposed Imposition of Civil Penalty referenced in Section II above, and

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

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland,
this 4th day of November 1985

Appendix

EVALUATION AND CONCLUSION

The licensee's June 24, 1985 response to the May 10, 1985 Notice of Violation and Proposed Imposition of Civil Penalties for American Can Company's Neenah, Wisconsin Plant denies the alleged violation of 10 CFR 31.5(c)(3) which requires that installation and removal of generally licensed gauges and tests of such gauges be performed in accordance with the labels or by a person holding a specific license. The licensee did not admit or deny the violation against unauthorized transfer of a generally licensed gauge; however, the licensee assumes that such an unauthorized transfer did occur. The licensee specifically requested that the NRC withdraw its Notice of Violation against 10 CFR 31.5(c)(3) and the associated civil penalty, or in the alternative, that the proposed civil penalty be mitigated on the basis of the licensee's prompt identification and reporting of the missing gauge and its corrective actions. The licensee's arguments and the NRC's evaluation are as follows:

Restatement of the Violations

I. VIOLATIONS ASSESSED A CIVIL PENALTY

A. 10 CFR 31.5(c)(3) requires that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to the general license shall assure that testing and installation as well as removal from installation involving the radioactive materials, its shielding or containment, are performed in accordance with the instructions provided by the labels or by a person holding a specific license pursuant by 10 CFR Parts 30 and 32 or from an Agreement State to perform such activities.

Contrary to the above, leak tests were performed on February 28, 1983, February 3, 1984, and December 20, 1984, by individuals not authorized to perform such tests. In addition, from 1974 to January 1985 the licensee installed and removed NDC System Model 103 RHL nuclear gauges containing 25 millicuries of americium-241 in a sealed source even though it did not hold a specific license and the instructions on the label of the gauge did not permit it to do so. Specific examples are: (1) a gauge was removed the week of December 23, 1984, and (2) a gauge was installed on January 22, 1985.

B. 10 CFR 31.5(c)(8) requires that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to a general license shall transfer or dispose of the device containing byproduct material only by transfer to persons holding a specific license pursuant to 10 CFR Parts 30 and 32 or from an Agreement State to receive the device.

Contrary to the above, a gauge was removed from service the week of December 23, 1984, and on February 28, 1985. The licensee was unable to determine the whereabouts of the gauge or produce records showing transfer or disposal of the gauge. The licensee presumes the gauge is lost or stolen.

These violations have been evaluated as a Severity Level III problem (Supplement VI).

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

Licensee's Response Concerning Violation I.A.

The licensee argues that its activities in connection with installation and removal of gauges were authorized. The label indicated that the "use" of the gauges is "subject to a general license or equivalent and the regulations of the U.S. NRC or a state with which the NRC has entered into an agreement for the exercise of regulatory authority," but did not include any specific guidance concerning the installation and removal of gauges. American Can Company relied on information provided by the manufacturer (NDC Systems, Inc.). The licensee believes that the information provided by NDC Systems, Inc., clearly stated that the gauges were portable and could be removed and installed under terms of a license issued by the State of California (an Agreement State). The licensee asserts that the State authorized the installation and removal of gauges from production lines without requiring a specific license.

The licensee also argues that its activities in connection with leak testing were authorized. The licensee described the "limited role" of American Can employees in collecting leak test samples for analysis which were performed by the gauge manufacturer. The licensee states that "a leak test should properly be seen as involving two activities: the collection of a sample (the swab), and the subsequent analysis of that sample....The wiping of the sources is a simple task that involves no special knowledge or expertise whatsoever." The licensee believes that its role in leak testing, as well as the absence of instructions concerning special licensing in the leak test kit made available to the licensee by the manufacturer, should be viewed as being in accordance with the label.

NRC Evaluation Concerning Violation I.A.

The staff agrees with the licensee that a violation of 10 CFR 31.5(c)(3) for installation and removal of generally licensed gauges by unauthorized persons is not appropriate and this portion of the violation is accordingly withdrawn. The staff originally proposed this violation after considering: (1) NRC regulations, (2) its understanding of the license issued to NDC Systems by the State of California, (3) the instructions provided on the label of the gauge, (4) conversations with California officials at staff and supervisory levels, and (5) an Enforcement Conference with a representative of American Can Company. Subsequent conversations with State of California officials and a review of information concerning the issuance of NDC Systems License No. 1933-70 GL revealed that, contrary to NRC's initial understanding, the State of California was aware that the manufacturer intended to distribute the gauge as a portable device and did not take exception to such use in the license. The State of California also did not include the provisions of 10 CFR 31.5(c)(3) restricting individuals (other than those acting under a specific license) from installation and removal of generally licensed gauges. Consequently, the instructions

provided to American Can Company by the manufacturer for use of the gauge as a portable device were consistent with the license issued by the State of California. Nonetheless, the NRC staff is concerned that American Can Company employees who are not trained radiation workers have been routinely engaged in the installation and removal of gauges containing radioactive material and recommend that this practice be discontinued.

With respect to the portion of Violation I.A. concerning the performance of leak tests by unauthorized individuals, the NRC notes that the label attached to each gauge contains the statement "Maintenance, tests or other service involving the radioactive material, its shielding and containment, shall be performed by persons holding a specific radioactive material license to provide these services." There is no provision in the manufacturer's Agreement State license which would allow persons other than those holding a specific license to perform leak tests. In addition, the NRC staff does not accept the licensee's contention that only the analysis of the sample might require technical expertise or be subject to detailed regulatory supervision. While the licensee is correct in identifying a leak test as a two part process, both parts are crucial to a successful test. The analysis of a sample is entirely dependent upon the sample submitted. Untrained individuals cannot be assumed to know the most likely points of leakage for such a gauge or the appropriate area of a gauge to be sampled for a reliable analysis to be performed. The instructions supplied by the manufacturer fail to describe either of these elements crucial to determining whether or not leakage of the sealed source has occurred. Because neither the license issued by the State of California nor the instructions in the label authorized the performance of tests by persons other than those holding a specific license, leak testing by the licensee is not permitted under 10 CFR 31.5(c)(3). However, this portion of Violation I.A. is being reclassified as a Severity Level IV to reflect the lower safety significance of the violation.

In view of the above, the civil penalty associated with Violation I.A. is withdrawn.

Licensee's Response to Violation I.B.

The licensee states it is unable to admit or deny under oath that an unauthorized transfer of a generally licensed gauge occurred because it is unable to determine the whereabouts of the gauge. The licensee does assume that such an unauthorized transfer did occur.

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

The licensee was unable to produce any evidence to indicate that an authorized transfer of the gauge took place. In the absence of such information, the NRC concludes that an unauthorized transfer did take place resulting in the disappearance of the gauge from the licensee's premises. A civil penalty is appropriate for this violation since this gauge, if disassembled and the source removed and handled, could result in harmful effects to any individual(s) who might handle the source.

Licensee's Response Concerning Mitigation

The licensee argues that it has implemented effective corrective actions in response to the Notice of Violation and Proposed Civil Penalty and will implement long term corrective action if the violations stand. In the event that the violation against 10 CFR 31.5(c)(3) is not withdrawn, the licensee requests that the civil penalties for Violations I.A. and I.B. be mitigated or remitted for prompt identification and reporting as well as corrective action.

NRC Evaluation of Licensee's Response Concerning Mitigation

The NRC staff does not agree with the statement that the gauge was promptly identified as missing. Although actions were initiated to locate the gauge, these actions do not warrant mitigation of the proposed civil penalty for this violation. Reporting of the missing gauge is required in accordance with 10 CFR Part 20. It should be noted that the licensee had sufficient reason to suspect loss or theft when the gauge could not be located during the week of January 22, 1985. The licensee then took approximately five weeks to determine that the gauge was missing before notifying the NRC on February 28, 1985.

Although the NRC does not dispute that corrective action was taken, the NRC was responsible for the initiation of several of these actions. For example, the effort to locate the gauge through the local newspapers was not undertaken until after suggestions by the NRC. The NRC advised the licensee to hire a health physicist to conduct a radiation survey of the facility and scrap yard. In addition, the notice posted on the bulletin board to plant employees failed to describe the radioactive nature of the gauge. Mitigation for corrective action is usually awarded in recognition of extraordinary prompt and extensive action taken on the licensee's own initiative, and not at the NRC's prompting.

Thus, for the reasons described above, the NRC concludes that the licensee did not promptly identify or report the missing gauge. Therefore, no further mitigation of the proposed civil penalty for this violation is warranted on the basis of either prompt identification and reporting or corrective action.

Conclusion

The NRC staff has carefully reviewed the licensee's response and has concluded that there is sufficient evidence to show that the licensee did not violate a portion of Violation I.A. concerning installation and removal of gauges by unauthorized individuals. The remaining portion of Violation I.A. remains, but has been classified as a Severity Level IV to more appropriately reflect the significance of the violation. The civil penalty for Violation I.A. has been remitted in its entirety. However, a $250 civil penalty is being imposed for Violation I.B. because of the significance of the unauthorized transfer of the gauge and the possible harm which could result to an individual who might come in contact with the missing gauge.

American Can Company

Timothy G. Rogers
Assistant General Counsel

American Lane
P.O. Box 3610
Greenwich, Connecticut 06836 - 3610
203-552-3368

December 3, 1985

VIA FEDERAL EXPRESS

Mr. James M. Taylor
Director, Office of Inspection
and Enforcement
United States Nuclear Regulatory
Commission
Washington, D.C. 20555

Re: American Can Company
Neenah, Wisconsin, Plant
General License EA 85-47

Dear Mr. Taylor:

This letter is in response to the Order Imposing Civil Monetary Penalty ("Order") that was issued on November 4, 1985. American Can Company appreciates the withdrawal by the Commission of the alleged violation concerning the installation and removal of gauges. As the Commission has acknowledged, the gauges in question were licensed as portable devices; hence, American Can Company employees were, in fact, authorized to install and remove them. Nevertheless, since the date of the enforcement conference on April 5, 1985, such gauges have been installed and removed by a person authorized to perform such activities.

We are disappointed, however, that the Commission has not also chosen to mitigate the penalty relating to the alleged unauthorized transfer of a gauge in the light of the substantial and timely activities undertaken by American Can Company to locate such gauge.

American Can Company does not request a hearing on this matter, and accordingly, enclosed herewith is a check in the amount of the civil penalty set forth in the Order ($250.00).

Very truly yours,

Timothy G. Rogers

TGR/bfg

cc: M. J. Anderson
J. H. Boehnlein
R. A. Meserve, Esq.

040011

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

DEC 10 1985

Docket Nos. 30-13105; 30-17570
License Nos. 37-17637-01; 37-17637-02
EA 85-130

E. L. Conwell & Company
ATTN: Mr. Walter E. Capper
Vice President and General Manager
Continental Business Center
Front and Ford Streets
Bridgeport, Pennsylvania 19405

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION 85-01)

This refers to the NRC inspection conducted on October 11 and 21-23, 1985 of activities authorized by NRC License Nos. 37-17637-01 and 37-17637-02 at your facilities in Bridgeport and Ormrod, Pennsylvania. The report of the inspection was forwarded to you on November 8, 1985. During the inspection, six violations of NRC requirements were identified, two of which were similar to violations identified during previous NRC inspections in 1982 and 1981. On November 19, 1985, we held an enforcement conference with you during which these violations, their causes, and your corrective actions were discussed.

Collectively, the violations demonstrate the need for improvement in management control over your licensed activities to assure adherence to NRC requirements and safe performance of licensed activities. To emphasize the importance of adequate oversight and control of your 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 Five Hundred Dollars ($500) for the violations set forth in the enclosed Notice. The violations have been classified in the aggregate as a Severity Level III problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985) (Enforcement Policy). Although Violation A could itself be classified as a Severity Level III violation in accordance with Section C.1 of Supplement VI of the Enforcement Policy, all the violations have been categorized in the aggregate as a Severity Level III problem to focus on the underlying cause, namely, a lack of adequate management control of licensed activities. The base value of a civil penalty for a Severity Level III violation or problem is $500. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustment has been deemed appropriate.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

You are required to respond to this letter, and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you also should describe those management controls you have instituted to ensure compliance with NRC requirements.

After reviewing your response to this Notice, including your proposed corrective actions, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the 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,

James M. Allan

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)
Commonwealth of Pennsylvania

NOTICE OF VIOLATION

AND

PROPOSED IMPOSITION OF CIVIL PENALTY

E. L. Conwell & Company
Bridgeport, Pennsylvania 19405

Docket No. 30-17570
License No. 37-17637-02
EA 85-130

An NRC inspection of activities authorized under NRC License No. 37-17637-02 was conducted at the E. L. Conwell & Company facilities in Bridgeport and Ormrod, Pennsylvania, on October 11 and 21-23, 1985. During the inspection, violations of six NRC requirements were identified. Two of the violations (Violations A and D below) are similar to violations that had been identified during previous NRC inspections of the license. Collectively, these violations indicate that adequate management control and oversight of licensed activities has not been exercised.

In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, ("Act"), 42 U.S.C. 2282, PL 96-295 and 10 CFR 2.205. The particular violations and the associated cumulative civil penalty 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. 10 CFR 20.207(b) requires that materials 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 October 11, 1985, a Troxler moisture density gauge containing licensed material, specifically cesium-137 and americium-241 sealed sources, was located in the entrance hall of an unsecured building in Bridgeport, Pennsylvania, an unrestricted area, and the gauge was neither under constant surveillance nor immediate control of the licensee.

B. 10 CFR 30.34(c) requires that each licensee confine its possession and use of byproduct materials to the locations and purposes authorized by the license. Condition 10 of License No. 37-17637-02 requires that licensed material be used only at 2024 Arch Street, Philadelphia, Pennsylvania, and at temporary job sites of the licensee.

Contrary to the above, since February 1984 until the present, licensed material was possessed at a facility in Bridgeport, Pennsylvania, and since September 1981 until the present, licensed material was possessed at a facility in Ormrod, Pennsylvania, and during those times, neither location was an authorized location by the license and neither was a temporary job site.

C. Condition 12 of License No. 37-17637-02 limits the use, designation of users, or supervision of use of licensed material to an individual named in the license, namely, the Radiation Safety Officer (RSO).

Contrary to the above, since October 1983 until the present, licensed material was used, designated for use, and supervised by individuals other than the Radiation Safety Officer (RSO) named in License Condition 12. The named RSO had not been employed by the licensee since October 1983.

D. Condition 15 of License No. 37-17637-02 requires that a physical inventory be conducted every six months to account for all sealed sources received and possessed under the license.

Contrary to the above, as of October 11, 1985, an inventory of sealed sources had not been conducted since April 5, 1984, an interval of more than six months.

E. Condition 14 of License No. 37-17637-02 requires that each sealed source containing byproduct material be tested for leakage and/or contamination at intervals not to exceed six months and if such sources have been in storage and not leak tested within six months, that prior to removal or transfer, the sources be tested.

Contrary to the above, on April 5, 1984, 40 gauges containing cesium-137 and americium-241 sealed sources were removed from storage at 2024 Arch Street, Philadelphia, Pennsylvania, transported to another location, and the sealed sources, which had not been leak tested within the prior six months, were not tested for leakage and/or contamination.

F. Condition 16 of License No. 37-17637-02 requires that licensed material be transported in accordance with the provisions of 10 CFR 71.5. 10 CFR 71.5(a) requires, in part, that transportation of licensed material be made in accordance with the applicable requirements of the Department of Transportation in 49 CFR 170-189.

49 CFR 173.448(a) requires that each shipment of radioactive materials be secured in order to prevent shifting during normal transportation.

Contrary to the above, as of October 23, 1985, Troxler moisture density gauges containing cesium-137 and americium-241 sealed sources were being transported in licensee vehicles, and the gauges were not secured to prevent shifting during normal transportation in that they were not braced.

These violations have been categorized in the aggregate as a Severity Level III Problem (Supplements IV and V).

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

Pursuant to the provisions of 10 CFR 2.201, E. L. Conwell & Company 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 I, 631 Park Avenue, King of Prussia, PA 19406, 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. If an adequate reply is not received within the time specified in this Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, E. L. Conwell & Company may pay the civil penalty by letter addressed to the Director, Office of Inspection and Enforcement, with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of Five Hundred Dollars ($500) or may protest imposition of the civil penalty in whole or in part by a written answer addressed to the Director, Office of Inspection and Enforcement. Should E. L. Conwell & 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 E. L. Conwell & Company 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1985), should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. E. L. Conwell & 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 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 M. Allan for

Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 17th day of December 1985

E. L. CONWELL & Co.
ESTABLISHED 1894
ENGINEERS - CHEMISTS - INSPECTORS

January 8, 1986

Director
Office of Inspection & Enforcement
United States Nuclear Regulatory Commission
Washington, DC. 20555

RE: Docket No. 30-17570, License No. 3717637-02, NRC Inspection 85-01 Notice of Violation December 10, 1985

Gentlemen:

With respect to subject notice we enclosed herewith our response as required.

We wish to assure you that it is our intentions to conduct our operations in complete compliance with the license requirements.

Respectfully submitted,

E. L. Conwell & Co.

W. E. Capper, P.E.

WEC/cdt
cc: Regional Administration
USNRC Region I
631 Park Ave.
King of Prussia, PA. 19406

CONTINENTAL BUSINESS CENTER, FRONT & FORD STS., BRIDGEPORT, PA 19405 (215) 277-2402

E. L. CONWELL & CO.

Violation	Admitted or Denied	Reason	Corrective Action	Date of Compliance
A	Admitted	Haste on part of Technician	Gauge immediately placed in locked storage. Directive issued to all work personnel reiterating handling and storage requirements.	10/12/85
B	Admitted	Oversight in not making ammendment to license indicating changes in locations.	License renewal application in june 1985 and subsequent modification request includes all locations.	6/85
C	Admitted	Oversight	RSO has been designated in accordance with provisions of license renewal application.	6/85
D	Admitted	Breakdown of communication between Bridgeport and Ormrod locations.	Material has been inventoried and all accounted for. Material has been entered into the equipment records which are scheduled in our Quality Assurance Program Which is audited twice annually.	10/13/85
E	Admitted	Misunderstanding regarding changes of storage location definition and removal from storage. Gauges were not removed from their storage containers.	Written directions have been issued defining removal or transfer changes of storage and requiring leak test of any unit not moved.	10/17/85
F	Admitted	Inattention of technician and supervisor.	Written directions issued calling attention to the requirement and directing compliance.	10/17/85

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

JAN 15 [illegible]

Docket No. 30-17456
License No. 21-19339-01
EA 85-02

Gorsira X-Ray, Inc.
ATTN: F. E. Gorsira
President
P. O. Box 3031
Farmington Hills, MI 48024

Gentlemen:

SUBJECT: ORDER TO SHOW CAUSE AND ORDER SUSPENDING LICENSE (EFFECTIVE IMMEDIATELY)

Enclosed herewith is an Order, effective immediately, suspending your byproduct material license and providing you with 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 the accompanying Order are not subject to the clearance procedures of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James M. Taylor, Deputy Director
Office of Inspection and Enforcement

Enclosure: Order to Show Cause and Order Suspending License (Effective Immediately)

cc: Michigan Dept. of Health
J. Chilingirian, Attorney

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
GORSIRA X-RAY, INC.	)	License No. 21-19339-01
Attn: F. E. Gorsira	)	Docket No. 30-17456
President	)	EA 85-02
P. O. Box 3031	)	
Farmington Hills, MI 48024	)	

ORDER TO SHOW CAUSE AND
ORDER SUSPENDING LICENSE EFFECTIVE IMMEDIATELY

I

Gorsira X-Ray, Inc., P. O. Box 3031, Farmington Hills, MI (licensee) is the holder of License No. 21-19339-01 (license) issued by the Nuclear Regulatory Commission (NRC). License No. 21-19339-01 authorizes the possession and use of byproduct materials for industrial radiography and is due to expire April 30, 1985.

II

On April 27, 1984, the NRC Region III Office conducted an inspection of the licensee's byproduct material program. As a result of this inspection, three violations of NRC requirements were identified. These violations included: (1) byproduct material was stored at locations not authorized by the license; (2) a survey meter that was used by the licensee during radiographic operations was not calibrated at required intervals; and (3) sealed radiography sources were not, in all cases, leak tested at required intervals.

On July 2, 1984, the NRC sent a Notice of Violation to the licensee. The Notice set forth the violations identified during the April 27, 1984 inspection and stated that the licensee was required to submit a written response to these violations within 30 days of the date of the Notice. The licensee failed to respond to the Notice within 30 days. The NRC Region III staff attempted to contact the licensee by telephone on six occasions during the period August 14 through September 24, 1984. These attempts were not successful. The NRC sent the licensee another letter on October 22, 1984 requesting a response to the July 2, 1984 Notice. The licensee did not respond. On November 26, 1984, the Region III staff contacted the licensee's attorney. The attorney stated the licensee had received the July 2, 1984 Notice and the October 22, 1984 letter from the NRC. The attorney also stated the licensee was currently involved in bankruptcy proceedings. The attorney made arrangements for a meeting on December 12, 1984 between the licensee and the NRC staff to discuss the July 2, 1984 Notice and the licensee's response. The licensee failed to attend this meeting.

These developments raise substantial questions as to whether the licensee has sufficient financial resources as well as the ability and willingness to comply with NRC requirements to ensure that licensed byproduct material will be used in a manner that will provide adequate protection of public health and safety. Accordingly, I find that the public health, safety, and interest require that this Order be made immediately effective.

III

In view of the above, it is hereby ORDERED, EFFECTIVE IMMEDIATELY, pursuant to Sections 81, 161b., and 186 of the Atomic Energy Act of 1954, as amended, and the regulations in 10 CFR Parts 2, 30, and 34 that:

a. License No. 21-19339-01 is suspended pending further Order, and the licensee shall cease and desist from any use of byproduct material in its possession and shall immediately place all such material in locked storage;

b. Within seven days of the issuance of this Order, the licensee: (1) shall transfer all licensed material within its possession to a person authorized by the NRC to possess such material as set forth in 10 CFR 30.41, and (2) shall notify the NRC Region III Office in writing to whom the material was transferred and when the transfer was completed; and

c. The licensee shall show cause, as provided in Section IV below, why License No. 21-19339-01 should not be revoked.

IV

Within 25 days of the date of this Order, the licensee may show cause why the license should not be revoked, as required in Section III above, by filing a written answer under oath or affirmation that sets 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 of the Office of Inspection and Enforcement may issue without further notice an Order revoking License No. 21-19339-01.

V

The licensee or any other person whose interest is adversely affected by this Order may request a hearing on this Order. Any request for hearing shall be submitted to the Deputy Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, within 25 days of the date of this Order. A copy of the request also shall be sent to the Executive Legal Director at the same address. A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

If a hearing is to be held concerning this Order, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order shall be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Deputy Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 15th day January 1985.

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

APR 02 1985

Docket No. 30-17456
License No. 21-19339-01
EA 85-02

Gorsira X-Ray, Inc.
ATTN: Mr. F. E. Gorsira
President
P.O. Box 3031
Farmington Hills, MI 48024

Gentlemen:

On January 15, 1985 NRC issued an Order to show cause why your license should not be revoked. The Order also provided that upon failure to file an answer within 25 days of the date of the Order, the Director of the Office of Inspection and Enforcement may issue, without further notice, an Order revoking your license.

Since you have not filed any answer as of this date and for the reasons set forth in the January 15, 1985 Order, License No. 21-19339-01 is hereby revoked.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosure: Order Revoking License

cc: J. Chilingirian
Suite 200
24055 Jefferson
St. Clair Shores, MI 48080

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
GORSIRA X-RAY, INC.	)	License No. 21-19339-01
P.O. Box 3031	)	Docket No. 30-17456
Farmington Hills, MI 48024	)	EA 85-02

ORDER REVOKING LICENSE

I

Gorsira X-Ray, Inc., P.O. Box 3031, Farmington Hills, MI (the "licensee") is the holder of Byproduct Material License No. 21-19339-01 (the "license") issued by the Nuclear Regulatory Commission (NRC). License No. 21-19339-01 authorizes the possession and use of byproduct materials for industrial radiography and is due to expire April 30, 1985.

II

By Order dated January 15, 1985, the license was suspended, effective immediately, and the licensee was given an opportunity to show cause why the license should not be revoked. 50 Federal Register 3850 (January 28, 1985). As described in that Order, the NRC took these actions on the basis of the licensee's failure to respond to a July 2, 1984 Notice of Violation that set forth the violations identified during the April 27, 1984 inspection. The NRC

Region III staff attempted to contact the licensee by telephone on six occasions during the period August 14 through September 24, 1984. These attempts were not successful. The NRC sent the licensee another letter on October 22, 1984 requesting a response to the July 2, 1984 Notice. The licensee did not respond. On November 26, 1984, the Region III staff contacted the licensee's attorney. The attorney stated the licensee had received the July 2, 1984 Notice and the October 22, 1984 letter from the NRC. The attorney made arrangements for a meeting on December 12, 1984 between the licensee and the NRC staff to discuss the July 2, 1984 Notice and the licensee's failure to respond to that Notice. The licensee failed to attend that meeting.

Because these developments raised substantial questions as to whether the licensee had sufficient financial resources as well as the ability and willingness to comply with NRC requirements to ensure that licensed byproduct material would be used in a manner that would provide adequate protection of public health and safety, the Order to Show Cause and Order Suspending License was issued on January 15, 1985 to the licensee. In accordance with the Order the licensee was required to cease and desist from any use of byproduct material in its possession and immediately place all such material in locked storage. The licensee was required within seven days of the issuance of the Order to transfer all licensed material within its possession to a person authorized by the NRC to possess and use such material and to notify the NRC Region III office in writing to whom the material was transferred and when the transfer was completed.

The Order also provided the licensee opportunity to file a written answer thereto within 25 days of the date of the Order and stated that, upon the licensee's failure to file an answer within the specified time, the Director, Office of Inspection and Enforcement, would issue a subsequent Order, without further notice, revoking the license. The licensee has not filed an answer to the Order. The NRC understands, however, that the radioactive material that was in the licensee's possession has been transferred to an authorized recipient. Because the circumstances described in the January 15, 1985 Order would warrant revocation of a license and the licensee has not demonstrated, though given an opportunity to do so, why its license should not be revoked, I have determined to revoke Byproduct Material License No. 21-19339-01.

III

Accordingly, pursuant to Sections 81, 161(b), and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2, 30, and 34, IT IS HEREBY ORDERED THAT Byproduct Material License No. 21-19339-01 is revoked.

This Order is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 2nd day of April 1985

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

APR 05 1985

License No. 34-13774-01
EA 85-40

John C. Haynes Company
800 Hebron Road
Newark, Ohio 43055

Gentlemen:

Enclosed is an Order which requires you to permit entry into your facility and removal of radioactive material and contamination which pose an imminent hazard to the public health and safety by a person or agency authorized by the Commission. This Order is being issued in view of the unauthorized use of licensed material, the extensive contamination of your facility, and the absence of a responsible individual who can act for you to ensure that the facility is safely maintained. The radioactive contamination in the facility and the physical condition of the facility and its contents pose an imminent hazard that requires immediate action to abate the hazard. After removal of the contamination which poses an imminent hazard, the Order requires you to further decontaminate the facility to the levels in the referenced guidelines for release for unrestricted use. You should note that you will be held responsible for any costs associated with the decontamination.

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 the accompanying Order are not subject to the clearance of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosure:
Order

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

II, A-44

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
JOHN C. HAYNES d.b.a.	)	
JOHN C. HAYNES COMPANY	)	License No. 34-13774-01
800 Hebron Road	)	EA 85-40
Newark, Ohio	)	

ORDER

I

John C. Haynes Company ("the licensee"), 800 Hebron Road, Newark, Ohio 43055, is the holder of Byproduct Material License No. 34-13774-01 which currently authorizes the licensee to possess americium-241 for storage only. During the 1970's the licensee's facility was used to irradiate diamonds and other gemstones using unsealed americium-241 for the purpose of inducing color changes. At one time the licensee possessed up to 25 curies of americium-241 and 2 curies of cerium-144. Subsequently, the licensee advised NRC that all radioactive material was properly disposed of at an authorized disposal facility with the exception of a small residual amount in the form of contamination of the licensee's facility. In 1981 the license was modified to limit activities to storage only of about 150 millicuries of americium-241 in the form of residual contamination.

II

On March 26, 1985, John C. Haynes was arrested by agents of the Federal Bureau of Investigation for unauthorized possession and use of radioactive byproduct material and for making false statements to the Nuclear Regulatory Commission (NRC). A substantial amount of americium-241, approximately 1-2 curies was recovered from the licensee's facility. A larger quantity, estimated by Mr. Haynes to be about 20 curies, was removed from the residence of an associate

of the licensee. The amount recovered far exceeds the 150 millicurie limit authorized by the license in the form of contamination in the licensee's facility. Survey measurements taken by NRC and the Department of Energy personnel at the time of the arrest indicates that the licensee's facility is contaminated with significant quantities of americium-241. Approximately 1 curie of americium-241 remains in four gloveboxes. Mr. Haynes stated that he had used flammable chemical agents to decontaminate gemstones and these chemicals are located in the gloveboxes. Further, highly radioactive waste material was found in the gloveboxes which the licensee stated is soaked with flammable cleaning fluid.

The recent discovery of Mr. Haynes' continued unauthorized use of licensed material, and the extensive contamination of the building in which material has been used, caps the already checkered history of Mr. Haynes as an NRC licensee. A number of events in recent years have raised questions regarding the licensee's capability to safely control licensed radioactive material. The licensee has been cited for a number of violations of NRC requirements. During a December 16, 1975 inspection of the licensee's facility, several items of noncompliance were identified relating to personnel overexposure, inadequate radiological surveys, inadequate personnel monitoring, inadequate storage of radioactive materials, and inadequate record keeping. Further, as a result of inspections on February 6-7, 1980, March 14, 1980, and November 17-19, 1981, items of noncompliance were identified relating to contamination in excess of a license condition, inadequate radiological surveys, and unauthorized storage and incineration of licensed material.

In 1980, the NRC was informed that the licensee was in default on the mortgage on its licensed facility and that the mortgagee was threatening foreclosure. The NRC's concern that the licensee might lose control over its licensed facility led to the issuance in 1981 of an Order to Modify License, which limited licensed activity only to storage of material and which required the licensee to submit a decontamination plan. 46 Fed. Reg. 44540 (Sept. 4, 1981). In 1982, upon presentation to the NRC of documentation that the licensee had paid off its mortgage and gained clear title to the property, and upon payment of inspection fees owed the NRC, the Order to Modify License was rescinded. 47 Fed. Reg. 26952 (Juhe 22, 1982). This was only done, however, after the license had been amended to limit licensed activity to storage only.

As a result of inspections conducted on July 21-22, August 4, 18, and 19, 1983 at the licensee's facility located at Rural Route 6, Newark, Ohio, Region III inspectors and an NRC consultant, Oak Ridge Associated Universities (ORAU), determined that extensive contamination existed, both in restricted and unrestricted areas of the facility. The majority of the contamination was located within the restricted laboratory area within the structure. Contamination was also extensive on the restricted area walls and floors. Other restricted area surfaces which are contaminated are sinks, shower drains, and exterior surfaces of the gloveboxes. Surface paint scraping also yielded extensive contamination.

On August 19, 1983, the licensee submitted to the Nuclear Regulatory Commission (NRC) a request for termination of the license in which the licensee indicated that he was financially unable to pay for decommissioning of its facility.

Under 10 CFR 30.36(d)(1)(v), a licensee must decontaminate its facility and provide a report to NRC confirming the absence of radioactive contamination. Accordingly, the NRC issued an Order to the licensee to show cause why the licensee should not be required to adopt the ORAU Decontamination Plan contained in the ORAU Final Report (May 1984), or an equivalent plan, and to decontaminate the facility in accordance with such plan. 49 Fed. Reg. 26325 (June 27, 1984). On about July 10, 1984, the licensee responded to the Order by asserting that he did not have the financial ability to pay for decontamination.

III

As noted in section II of this Order, the licensee's facility is now substantially more contaminated then it was at the time of the August 1983 ORAU survey as the result of the licensee's unauthorized use of americium-241 at the facility. Approximately 1-curie of americium-241 is now present in the four gloveboxes at the facility as contrasted to an estimated 150 millicuries in the entire facility in August 1983. The ventilation system, which maintains a negative pressure on the gloveboxes (thereby helping avoid the dispersal of the contamination offsite) may be shut off due to the licensee's past failures to make timely electric utility payments. Although no contamination has to date been detected off the licensee's property, a substantial amount of americium-241 is present in the facility in powder form which could be dispersed as a result of vandalism, fire or other phenomena.

As a condition of his release on his own recognizance, the U. S. magistrate prohibited Mr. Haynes from going to the facility. Even if he were permitted access to the facility, Mr. Haynes' unauthorized use of material indicates that

he neither appreciates the hazard posed by the material nor can be trusted to safely maintain the facility. There is no other responsible licensed individual in a position to ensure the security and the safety of the facility. However, 24-hour security is being maintained by the Licking County Sheriff's Office through an agreement with NRC as a short-term measure.

In view of the extensive contamination of the licensee's facility and in the absence of a responsible individual who can act for the licensee to ensure that the facility is safely maintained, the Commission lacks adequate assurance that the licensee's facility can remain in its present state without undue risk to public health and safety. The radioactive contamination of the facility and the physical condition of the facility and its contents pose an imminent hazard that requires immediate action to abate the hazard. Accordingly, I have determined pursuant to 10 CFR 2.202(f) that the public health, safety, and interest require that the licensee be ordered, effective immediately, to permit entry into his facility and removal of radioactive material and contamination by a person or agency authorized by the Commission.

I have also determined that License No. 34-13774-01 should be revoked. Mr. Haynes' unauthorized use of radioactive material, in such a manner as to greatly increase the contamination of his facility and the hazard it poses to the public, evinces a wanton disregard for the Commission's requirements and public health and safety. The licensee's precarious financial position also draws into question the wisdom of permitting him to remain a licensee, even in a possession-only status, and the licensee has previously requested termination of the license. All these circumstances constitute sufficient

cause for revocation of the license under section 186 of the Atomic Energy Act. In view of the licensee's willful disregard of the Commission's requirements, and the lack of adequate control over licensed activities, I have determined that no prior notice is required under 10 CFR 2.201 and that, pursuant to 10 CFR 2.202(f), removal of all radioactive material from the facility and completion of decontamination is immediately required and, thereafter, License No. 34-13774-01 should be revoked.

IV

Accordingly, pursuant to Sections 81, 161b, 161i, 161o, and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and Part 30, IT IS HEREBY ORDERED THAT:

A. Effective immediately, the licensee shall permit a person or agency authorized by the Commission to enter, survey, and remove from the facility radioactive material and contamination and contaminated objects which pose an imminent hazard to the public health and safety. J. C. Haynes is responsible for the costs associated with the removal of material and any decontamination necessitated by the imminent hazard.

B. Effective immediately, upon completion of the action specified in section A above, the licensee shall (1) remove or cause to be removed any remaining radioactive material from the facility and (2) decontaminate or cause to be decontaminated the facility and its environs to the levels specified in "Guidelines for Decontamination of Facilities and Equipment

Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source of Special Nuclear Material." Following the removal of all radioactive material from the facility and completion of decontamination activities as specified herein, Byproduct Material License No. 34-13774-01 will be revoked.

V

The licensee may show cause why this Order should not have been issued and should be vacated by filing a written answer under oath or affirmation within 20 days of the date of this Order which sets forth the matters of fact and law on which the licensee relies. The licensee may answer as provided in 10 CFR 2.202(b) by consenting to this Order. Upon the failure of the licensee to answer within the specified time, this Order shall be final without further proceedings.

The licensee or any other person who has an interest affected by this Order may request a hearing within 20 days after issuance of this Order. Any answer to this Order or request for hearing shall be submitted to the Director, Office of Inspection and Enforcement, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555. Copies shall also be sent to the Executive Legal Director at the same address. If a person other than the licensee requests a hearing, that person shall describe specifically, in accordance with 10 CFR 2.714(a)(2), the nature of the person's interest and the manner in which that interest is affected by this Order. AN ANSWER TO THIS ORDER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF SECTION IV OF THIS ORDER.

If a hearing is requested, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether, on the basis of the matters set forth in sections II & III of this Order, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland,
this 5th day of April 1985.

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

MAY 10 1985

License No. 34-13774-01
EA 85-40

John C. Haynes Company
800 Hebron Road
Newark, Ohio 43055

Gentlemen:

Enclosed is an Order which limits access of you, as well as other individuals, to areas controlled for purposes of protection of individuals from radiation and radioactive material at your 6532 Parr Road facility until decontamination activities are completed. Such access is prohibited unless the prior approval of the Regional Administrator or his designee is obtained. This Order is being issued to prevent interference with the decontamination activities, the spread of contamination, and any unnecessary radiation exposure. A violation of this Order may result in civil and criminal sanctions.

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 the accompanying Order are not subject to the clearance of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosure:
Order

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
JOHN C. HAYNES d.b.a.	)	License No. 34-13774-01
JOHN C. HAYNES COMPANY and	)	
Property Located at	)	EA-85-40
6532 Parr Road	)	
Rural Route 6	)	
Newark, Ohio	)	

ORDER PROHIBITING ACCESS TO CONTROLLED AREAS

I

On April 5, 1985, the Director, Office of Inspection and Enforcement, issued an Order requiring among other things that John C. Haynes Company ("Licensee") permit entry of NRC authorized individuals into its facility at 6532 Parr Road, Rural Route 6, Newark, Ohio, for the purpose of removal of radioactive material and contamination which pose an imminent hazard to the public health and safety. In accordance with the Order, the license is to be revoked following the completion of decontamination and removal of radioactive material. The licensee did not contest the Order. The Order was issued because of the history of the licensee's unauthorized possession and use of radioactive material, the extensive contamination at the facility, the licensee's financial condition, and the potential for dispersion of radioactive material as a result of vandalism, fire, or other phenomena.

At the time the Order was issued, Mr. Haynes, the licensee's sole agent, had been arrested by the Federal Bureau of Investigation for unauthorized possession and use of radioactive material and making false statements to the Commission. He was prohibited by order of a U.S. Magistrate from going to the facility at 6532 Parr Road, Rural Route 6. The Director concluded in the previous Order that Mr. Haynes' disregard for the Commission's requirements and the public health and safety as evidenced by his unauthorized use and possession of material and the contamination of the facility demonstrates that he neither appreciates the hazards posed by the radioactive material nor can be trusted to safely maintain the facility. The Director also found that the radioactive contamination of the facility and the physical condition of the facility and its contents pose an imminent hazard that requires immediate action to abate the hazard. Consequently, the Director concluded that immediate action pursuant to 10 CFR 2.202(f) was required to decontaminate and to remove all radioactive material from the facility.

II

The Court's prohibition of Mr. Haynes from going to the facility was lifted as a result of the May 7, 1985 dismissal by the U.S. Magistrate without prejudice of the charges against Mr. Haynes. Although decontamination activities are under way the facility remains extensively contaminated and the imminent safety hazard remains. The presence of unauthorized individuals including Mr. Haynes in areas controlled for purposes of protection of individuals from exposure to radiation and radioactive materials could (1) interfere with the decontamination efforts

by disturbing monitoring equipment, delaying activities, and causing resources to be diverted to monitor and protect such individuals, (2) cause a hazard to such individuals as a result of their contamination, and (3) cause a hazard to the general public if such individuals remove contamination or radioactive material from the facility.

Therefore, I Have determined that neither Mr. Haynes nor any other unauthorized individual should be permitted access to any area controlled by the NRC or its agents for the purpose of protection of individuals from exposure to radiation and radioactive materials in and around the facility at 6532 Parr Road, Rural Route 6, until the decontamination activities under the previous order are completed unless specific authorization has been approved by the Regional Administrator, Region III, or his designee. I have also determined that, pursuant to 10 CFR 2.202(f), the public health, safety, and interest requires that this Order be immediately effective.

III

Accordingly, pursuant to Sections 81 and 161b, of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and Part 30, IT IS HEREBY ORDERED THAT:

Effective immediately, neither Mr. Haynes nor any other individual may be permitted access to any area controlled by the NRC or its agents for the purpose of protection of individuals from exposure to radiation and radioactive materials in and around the facility at 6532 Parr Road, Rural Route 6, Newark, Ohio until the decontamination activities under

the April 5, 1985 Order have been completed unless specific authorization has been received from the Regional Administrator, Region III, or his designee, following the date of this Order.

IV

The licensee may show cause why this Order should not have been issued and should be vacated by filing a written answer under oath or affirmation within 20 days of the date of this Order which sets forth the matters of fact and law on which the licensee relies. The licensee may answer as provided in 10 CFR 2.202(b) by consenting to this Order. Upon the failure of the licensee to answer within the specified time, this Order shall be final without further proceedings.

The licensee or any other person who has an interest affected by this Order may request a hearing within 20 days after issuance of this Order. Any answer to this Order or request for hearing shall be submitted to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Copies shall also be sent to the Executive Legal Director at the same address. If a person other than the licensee requests a hearing, that person shall describe specifically, in accordance with 10 CFR 2.714(a)(2), the nature of the person's interest and the manner in which that interest is affected by this Order. AN ANSWER TO THIS ORDER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF SECTION III OF THIS ORDER.

If a hearing is requested, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 24th day of May, 1985.

AUG 26 1985

Mr. John C. Haynes
6532 Parr Road
Newark, Ohio 43056

License No. 34-13774-01

Dear Mr. Haynes:

This is to advise you that your NRC License No. 34-13374-01 has been terminated on August 19, 1985. This termination is in accordance with the NRC Order issued to you on April 5, 1985.

Decontamination activities were concluded at your facility on July 26, 1985.

Surveys performed by the NRC, Oak Ridge Associated Universities, and the Ohio Disaster Services Agency revealed no residual radioactive contamination levels in excess of the NRC release criteria, thus your facility may be released for unrestricted use. We have enclosed a copy of the report regarding the decontamination of your facility.

If you have any questions please feel free to contact me. (312) 790-5612

Sincerely,

W. L. Axelson, Chief
Nuclear Materials Safety
and Safeguards Branch

Enclosure: As stated

Oak Ridge
Associated Universities
Post Office Box 117
Oak Ridge, Tennessee 37831-0117

Manpower Education
Research, and Training
Division
Telephone: 615-576-3437

August 1, 1985

Mr. William Axelson
Chief, NMSS Branch
Nuclear Regulatory Commission, Region III
799 Roosevelt Raod
Glen Ellyn, Illinois 60137

Dear Mr. Axelson:

This letter provides a preliminary report of the final decontamination of the J. C. Haynes site. Phase II of the J. C. Haynes decontamination plan was completed on Friday, July 26, 1985. Preliminary field data indicates that the residual radioactive contamination levels in the facilities and the environment are less than the release criteria specified in Appendix A of our letter of July 9, 1985. All samples scanned in the field will be analyzed by our laboratory staff, with a completion date of August 7, 1985. Verification and review of all site data will be completed by August 9, 1985.

The decontamination methods for the areas exterior to the building followed the original plan very closely except for the roof of the house. The roof tiles (porcelanized enamel over steel) could not be cleaned using conventional decon solutions. The final method utilized was wet sandpaper, followed by conventional cleaning solutions. This method resulted in substantial savings in time, and a large reduction of waste volume.

Before removing the 760 liter tank from under the garage, the garage was stabilized. The tank (larger than previously estimated) was removed without incident and placed in an LSA waste container.

The building interior presented several problems which resulted in changes to the original decontamination plan. A brief highlight of each section follows:

A. Kitchen/Living Room

The kitchen floor contained one contaminated area which was cleaned to the release limits. The walls and ceiling met the release criteria with little or no cleaning. Several areas of spot contamination were found on the floor of the living room. Rather than spot clean the floor, the entire floor was stripped using a marine strip epoxy paint remover. This method was chosen because contaminated areas were suspected to have been covered with several layers of paint.

B. Bathroom

One large area of contamination was found on the bathroom floor. This is suspected to have resulted from a spill in the hot lab which extended under the wall into the bathroom. The contaminated area

extended under the bathtub, requiring removal of the bathtub. General surface cleaning would not reduce the levels to the release criteria, and it was necessary to scabble the floor.

C. Attic

The attic was surveyed by portable alpha scintillation meter and was found to be releasable. The survey was limited in nature due to evidence of snake infestation. Futher verification will be established by counting a sample of the insulation material using gamma spectroscopy.

D. Hot Lab and Tent Area

The tent area was removed and the entire floor was stripped using paint remover. No further cleaning was necessary. The hot lab required removal of wall panels to gain access to the concrete floor beneath the walls. The contaminated areas on the walls were removed and disposed of as contaminated waste. Two ceiling panels were removed and disposed as waste; the rest of the ceiling was cleaned and left intact. The floor was stripped using paint remover, then scabbled to remove the surface areas which did not meet the release criteria. The four floor wells were removed, as well as the emergency shower drain and pipeline. The physical damage to the hot lab and bathroom was minimized as much as possible.

The site was prepared for closure by repairing industrial type hazards which resulted from the clean-up activities. The electrical main was disconnected, and electrical service to the site was terminated. This also renders the pump for the well inoperative. Note: The bathtub was not reconnected to the plumbing system, therefore the electical main should not be reconnected until the plumbing is repaired or capped. All windows, doors or openings made in the exterior walls were boarded up, and the holes in the floor of the hot lab (resulting from removal of the four floor wells and emergency shower floor drain) were covered with plywood. All excavated areas have been back-filled to reduce the risk of injury. The building keys have been turned over to Sheriff Billy, Licking County, Ohio.

Final site preparation was made by transferring all waste to Battelle-Columbus for final disposal. All equipment leased for site operation (trailer, dumpster, Port-A-Jon's, etc.) is in the process of being removed from the site by the vendors.

A draft of the final decontamination report will be available for review by September 30, 1985.

We appreciate the cooperation and help rendered by you and your staff.

Sincerely,

Roger J. Cloutier

Roger J. Cloutier, Director
Professional Training Programs

cc: James D. Berger
Glenn L. Murphy
Luis E. Velazquez

OCT 8 1985

Docket No. 30-19059
License No. 43-19662-01
EA 85-92

Met-Chem Engineering Laboratories
ATTN: N. W. Hansen, President
369 West Gregson Avenue
Salt Lake City, Utah 84115

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC INSPECTION REPORT 30-19059/85-01 & 30-19059/85-02)

This refers to the routine, unannounced radiation safety inspections conducted on May 10, June 10-11, and July 2-3, 1985, at your facilities in Salt Lake City, Utah. Violations identified during the inspections by Messrs. D. B. Spitzberg, C. A. Hooker, and L. T. Ricketson of this office were discussed with you and members of your staff at the conclusion of the inspection. This also refers to telephone conversations on June 19, 1985, and our Confirmatory Action Letter to you dated June 20, 1985, confirming your agreement to cease conducting activities where the NRC has jurisdiction until such time as resumption of such activities is concurred in by the NRC. An enforcement conference was held on June 26, 1985, in the Region IV office with you and members of the Region IV staff to discuss the violations identified during the NRC inspection. Resumption of activities was concurred in by the NRC on August 1, 1985.

The violations which occurred during the period January 17, 1984, to June 11, 1985, are described in the enclosed Notice. The violations show a lack of management control over your licensed operations. In particular, the use of an unauthorized and unqualified individual to perform radiography is of considerable concern. In addition to these concerns, we have also discussed our concerns related to an apparent overexposure that occurred during the second calendar quarter of 1984. This matter may be the subject of further enforcement action in the future.

To emphasize the importance of compliance with NRC requirements, 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 Five Thousand Dollars ($5,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the violations have been categorized in the aggregate as a Severity Level III problem. The base value of a civil penalty for a Severity Level III violation or problem is $5,000. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustment has been deemed appropriate.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

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

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,

ORIGINAL SIGNED BY:
ROBERT D. MARTIN

Robert D. Martin
Regional Administrator

Enclosure: Notice of Violation and Proposed
Imposition of Civil Penalties

cc: Utah Radiation Control Program Director

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Met-Chem Engineering Laboratories
Salt Lake City, Utah

Docket: 30-19059
License: 43-19662-01
EA 85-92

During NRC inspections conducted on May 24, June 10-11, and July 2-3, 1985, a number of violations were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

1. 10 CFR 20.101(a) requires, in part, that in accordance with the provisions of §20.102(a), and except as provided in §20.101(b), no licensee shall possess, use, or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter from radioactive material a total occupational dose in excess of 1.25 rem per calendar quarter to the whole body.

   Contrary to the above, a licensee radiographer received a whole body dose of 1.84 rem during the second quarter of 1984, without the licensee having determined the individual's prior dose pursuant to §20.102(b).

2. 10 CFR 20.201(b) requires, in part, that each licensee make or cause to be made surveys as may be necessary for the licensee to comply with the regulations in this part. Paragraph 20.201(a) states that as used in the regulations in this part "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials under a specific set of conditions.

   Contrary to the above, the licensee failed to conduct an adequate evaluation of a radiation exposure to a radiographer (second quarter 1984 dose of 1.84 rem) working in Evanston, Wyoming, on June 25, 1984.

3. 10 CFR 34.31(a)(4) states, in part, that a licensee shall not permit any individual to act as a radiographer until such individual has demonstrated understanding of the instructions of this paragraph by successful completion of a written test.

   License Condition 13.A states, in part, that licensed material shall be used by individuals who have completed the training program described in "Emergency and Operating Procedures and Training Program," attached to letter dated September 5, 1980. Section 12.1 on page TP-25 of the Training Program states that, "upon completion of the radiographer's training program and passing the written examination with an 80% or better and showing that he is able to operate the equipment and use it in a safe and proper manner, he will be assigned a radiographer."

Contrary to the above, for several months prior to July 14, 1984, three licensee employees had been assigned to work as radiographers without having passed a written qualifying examination. The individuals were administered the written qualifying examination on August 24, 1983. The examination was not scored until the date of the NRC inspection, June 11, 1985, during which it was determined that one individual's score was 62% - a failing score.

4. 10 CFR 20.202(a)(1) requires, in part, that each licensee shall supply appropriate personnel monitoring equipment to, and shall require the use of equipment by each individual who enters a restricted area under such circumstances that he receives or is likely to receive a dose in any calendar quarter in excess of 25 percent of the applicable value specified in §20.101.

   Contrary to the above, appropriate personnel monitoring equipment was not provided to a licensee radiographer working in Wyoming, during the period May 19-31, 1984.

5. 10 CFR 20.401(b) requires, in part, that each licensee shall maintain records showing the results of surveys required by §20.201(b). Paragraph 20.201(b) requires, in part, that each licensee make or cause to be made surveys as may be necessary for the licensee to comply with the regulations in this part. Paragraph 20.201(a) states that as used in the regulations in this part "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials under a specific set of conditions.

   Contrary to the above, the licensee failed to document the evaluation made in May 1984, concerning a radiographer's monthly film badge reading of 3.37 rem, to determine compliance with the exposure limits specified in §20.101(a). The work performed by the radiographer during this period took place in Evanston, Wyoming.

6. 10 CFR 34.33(a) requires, in part, that pocket dosimeters shall be recharged at the start of each shift.

   Contrary to the above, a licensee radiographer failed to recharge his pocket dosimeter at the start of his shift on approximately eleven (11) occasions during May 1985.

7. 10 CFR 34.11(d) requires, in part, that the licensee have in place an internal inspection system adequate to assure that Commission requirements are followed by each radiographer's assistant. The inspection interval is not to exceed three months.

   Contrary to the above, the licensee did not perform an internal inspection between January and July 1984 of the work of one radiographer's assistant who worked on a regular basis out of the Evanston, Wyoming, office through June 1984.

8. License Condition 10 lists by manufacturer and model numbers, the authorized source assembly/exposure device combinations. Item B authorizes use of the Gulf Nuclear RGSA-13 source assembly only in the Gamma Industries Century SA exposure device.

   Contrary to the above, during the period of July 18, 1984, through August 23, 1984, the licensee used a Gulf Nuclear RGSA-13 iridium-192 source assembly in a Gulf Nuclear Model 20V exposure device in Evanston, Wyoming.

9. 10 CFR 34.25(b) requires, in part, that each sealed source shall be tested for leakage at intervals not to exceed six (6) months.

   Contrary to the above, a leak test was not performed on iridium-192 source SN 8540 during the seven (7) month period from November 1, 1984, to June 6, 1985.

10. License Condition 18 requires, in part, that licensed material be used in accordance with statements, representations, and procedures contained in the application dated February 18, 1981, "Emergency and Operating Procedures and Training Program," attached to letter dated September 5, 1980, and revised procedures attached to letter dated March 2, 1982.

    a. Attachment B, Section 1.2.29 of the Emergency and Operating Procedures and Training Program requires that, "a written statement to the Radiation Protection Officer will be made if you have received 50 mR or more in one day (based on pocket dosimeter readings)." This report will include the reasons why, and working conditions.

       Contrary to the above, on six occasions during the period from February 16, 1985, to May 23, 1985, radiographers recorded daily dosimeter readings greater than 50 mR and no written statements were submitted to or solicited by the Radiation Protection Officer.

    b. Attachment 1-E to the Training Program describes the annual safety refresher training to be given to all radiographers and assistant radiographers and requires that the licensee document all in attendance and subjects covered and discussed.

       Contrary to the above, on the date of the inspection, the licensee did not have records documenting any refresher training sessions.

11. 10 CFR 71.12 requires, in part, that a general license for shipment in Department of Transportation (DOT) specification containers is issued provided the licensee has a quality assurance program whose description has been submitted to and approved by the Commission as satisfying the provisions of 10 CFR Part 71, Subpart H, provided the licensee has a copy of the certificate of compliance, and provided the shipper registers in writing with the NRC as a user of the specific DOT specification container.

Contrary to the above, as of June 10, 1985, the licensee had not established an approved quality assurance program, and had not registered with the NRC as a user of the DOT specification containers in its possession used to transport greater than 20 Ci quantities of iridium-192 in special form.

12. 10 CFR 30.51(a) requires, in part, that each person who receives byproduct material shall keep records showing the transfer and disposal of such byproduct material.

    Contrary to the above, the licensee did not keep records showing the transfer of a Model RGSA-13 iridium-192 source (S/N 8016) which was transferred to another licensee during September 1984.

13. 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 of the DOT in 49 CFR Parts 170-189 appropriate to the mode of transport.

    a. 49 CFR 173.476(a) requires, in part, that each shipper of special form radioactive material shall maintain on file for at least 1 year after the last shipment, a complete certification and supporting safety analysis demonstrating that the special form materials meet the requirements of 49 CFR 173.469.

       Contrary to the above, on the date of the inspection, a file had not been maintained of the certifications for special form sources possessed and shipped by the licensee in 1985.

    b. 49 CFR 172.403 requires, in part, that each package of radioactive material, unless excepted from labeling by 49 CFR 173.421 - 173.425 be labeled, as appropriate, with a RADIOACTIVE WHITE-I, a RADIOACTIVE YELLOW-II, or a RADIOACTIVE YELLOW-III label.

       Contrary to the above, up to the time of the inspection, licensee packages used for transporting Type B quantities of iridium-192 had not been properly labeled with a Radioactive Yellow-III label as required.

Collectively, the violations have been evaluated as a Severity Level III problem (Supplements IV, V, and VI).

Cumulative Civil Penalty - $5,000 assessed equally among the violations.

Pursuant to the provisions of 10 CFR 2.201, Met-Chem Engineering Laboratories is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, with a copy to the Region IV Office of the USNRC, 611 Ryan Plaza Drive, Suite 1000, Arlington, Texas 76011, within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violations; (2) the reasons for the violations if admitted; (3) the corrective steps that have been

taken and the results achieved; (4) the corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, 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, Met-Chem Engineering Laboratories may pay the civil penalties by letter addressed to the Director, Office of Inspection and Enforcement, with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of Five Thousand Dollars ($5,000) or may protest imposition of the civil penalties in whole or in part by a written answer addressed to the Director, Office of Inspection and Enforcement. Should Met-Chem Engineering Laboratories 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 Met-Chem Engineering Laboratories 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 V.B of 10 CFR Part 2, Appendix C (1985), 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 2.202, but may incorporate by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Met-Chem Engineering Laboratories' attention is directed to the other provisions of 10 CFR 2.205, regarding the procedures for imposing civil penalties.

Upon failure to pay the 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

Robert D. Martin
Regional Administrator

Dated at Arlington, Texas
this 9 day of October 1985

BIELE, HASLAM & HATCH P.C.
50 WEST BROADWAY, FOURTH FLOOR
SALT LAKE CITY, UTAH 84101
801-328-1866

IRVING H. BIELE
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PAUL D. VEASY
J. PETER MULHERN
MICHAEL J. STAAB*
*ADMITTED IDAHO ONLY

GLEN M. HATCH
(1918-1983)

November 5, 1985

Director, Office of Inspection and Enforcement
USNRC
Washington, D.C. 20555

NOV - 6 1985

REPLY TO NOTICE OF PROPOSED VIOLATIONS

Subject: Met-Chem Engineering Laboratories, Inc.
Docket No. 30-19059
License No. 43-19662-01
EA 85-92

Gentlemen:

We are making a reply on behalf of Met-Chem Testing Laboratories of Utah, Inc.. Mr. N. W. Hansen received your communication and provided us with the copy.

Please be advised that Met-Chem Engineering Laboratories, Inc. was a wholly owned subsidiary of Hoskins-Western-Sonderberg, Inc.

Met-Chem Engineering Laboratories, Inc. operated from several locations, including Salt Lake City. It operated a separate office location in Wyoming.

Several Salt Lake City residents desired to purchase the Salt Lake Office from the Met-Chem Engineering Laboratories, Inc. and created a corporation called NWH Corporation, Inc.

Met-Chem Engineering Laboratories, Inc. was a Nevada corporation and Hoskins-Western-Sonderberg, Inc. was a Nebraska corporation. Under a date of September 10, 1984, NWH Corporation, Inc. purchased the assets located in Salt Lake City from the selling corporations.

In a separate transaction, another corporation purchased the assets located in Wyoming from the selling corporations. There is no relationship between the Wyoming corporation and the Utah corporation.

Met-Chem Engineering Laboratories, Inc. withdrew from the State of Utah and thereafter, in October of 1984, NWH Corporation changed its name to MET-CHEM TESTING LABORATORIES OF UTAH, INC. and has since that date been operating under this date.

Your letter of notice of violation contains some matters which may affect our client, Met-Chem Testing Laboratories of Utah, Inc. and others which relate to Met-Chem Engineering Laboratories. It appears that there would be no gain in referring to the technical lapse in the notice and therefore in the Exhibit 1 attached hereto, we respond to those matters which affect this corporation, Met-Chem Testing Laboratories of Utah, Inc.

Although we have no relationship with Met-Chem Engineering Laboratories, as a matter of courtesy, we are forwarding a copy of your letter and some comments as to certain items indicated thereon.

If you receive any inquiries from our customers, it would be appreciated if you would clarify the responsibility of this corporation and the responsibility of Met-Chem Engineering Laboratories.

You are advised that we object seriously to the imposition of a $5,000 penalty and draw your attention to the fact that all of the claimed violations are either routine, nonrisk, or involving violations or of a very questionable nature and not the responsibility of this corporation. If you do not determine to waive the penalty, after consideration of the corrective action that has been taken and the nature of the violations, obviously this item should be considered as a demand for hearing.

Respectfully yours,

BIELE, HASLAM & HATCH

IRVING H. BIELE
Attorneys for Met-Chem Testing
Laboratories of Utah, Inc.

IHB:cd
cc: Region IV Office of the USNRC
Met-Chem Testing Laboratories of Utah, Inc.

EXHIBIT 1 TO NUCLEAR REGULATORY COMMISSION
MET-CHEM ENGINEERING LABORATORIES, INC.
NOTICE OF VIOLATIONS

VIOLATIONS THAT MAY BE THE RESPONSIBILITY
OF MET-CHEM TESTING LABORATORIES OF UTAH, INC.

ITEM 6: Item 6 of the October 8th letter indicates that the pocket dosimeter of one licensed radiographer was not recharged at the start of his shift on several occasions.

1. It is admitted that the dosimeter was not recharged on the indicated occasions.

2. A record was kept on each occasion of the reading of the dosimeter but the reading was nominal and since the dosimeter collectively cumulates the record, the record of each subsequent day's dose could be determined. At all times during this period the daily records were maintained and no excessive dose was indicated.

3. Corrective action has been undertaken and all personnel are required to reset dosimeters daily as well as record the daily settings.

4. The daily record of dosimeter readings is regularly reviewed to be certain that the dosimeters are reset as well as the reading recorded.

5. Full compliance was effected immediately after notification of the technical violation.

ITEM 9 of the October 8th letter:

1. Admit that the leak test on a sealed source (radioactive isotopes) was not performed within a six month's period.

2. Ordinarily in the business of the corporation it does not keep the radioactive isotopes over a six month's period. This was an unusual case where they were kept for a longer period. The leak test was performed one month late and there was no leak.

ITEM 13: Items 13a and 13b of the October 8th letter.

13a. Deny. A file was maintained as to the certifications for special form sources processed and shipped by the licensee in 1985. These records were not located until after the inspection but were in fact in the possession of the company.

13b. Deny that the cameras were improperly labeled. Each camera was labeled with a yellow with magenta containing the words, "Caution, Radioactive Materials." An inspector from the Nuclear Regulatory Commission, two years prior thereto, had stated that this marking was sufficient for the cameras as the same were placed in a special welded box that was bolted to the floor and management wrote a letter informing him of the method of transportation and received a reply approving the same.

All cameras have now been labeled with the radioactive yellow three label.

It is respectfully submitted that the transgressions, if any and where indicated, were technical and did not constitute a violation that put at risk any of the employees or any member of the public. All violations have been corrected and it is submitted that the inspection has effected the purpose of the inspection by tightening procedures and making this corporation more aware of the necessity of constant, careful overseeing of daily activities and detailing reports. Penalty, if any, that is charged to this firm should be reduced dramatically as the same would afford no beneficial purpose.

DATED this 5th day of November, 1985.

Respectfully submitted,

BIELE, HASLAM & HATCH

IRVING H. BIELE
Attorneys for Met-Chem Testing
Laboratories of Utah, Inc.

BIELE, HASLAM & HATCH P.C.
50 WEST BROADWAY, FOURTH FLOOR
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J. PETER MULHERN
MICHAEL J. STAAB*
*ADMITTED IDAHO ONLY

GLEN M. HATCH
(1918-1983)

November 20, 1985

Director, Office of Inspection and Enforcement
USNRC
Washington, D.C. 20555

SUPPLEMENTAL REPLY TO NOTICE OF PROPOSED VIOLATIONS

Subject: Met-Chem Engineering Laboratories, Inc.
Docket No. 30-19059
License No. 43-19662-01
EA 85-92
Amendment to Item 13b of Prior Reply of Met Chem Testing Laboratories of Utah, Inc., a Corporation, and Supplemental Report as to the Records as They Involve Items Occurring Prior to September 10, 1984.

Gentlemen:

We wish to amend, for clarification, the answer to Item 13b as contained in our prior letter dated November 5, 1985, and relating to this same transaction. This amendment for clarification is the result of a staff conference on November 19, 1985.

ITEM 13b of the October 8th letter:

1. Admit that a camera did not have an overpack that was properly labeled.

2. The camera was carried in a sealed box that was bolted to the floor of the transport vehicle which had a "Caution Radioactive Material" label, but not the transport index Yellow-III label.

3. Corrective action has been accomplished. Each camera has its own overpack and both overpack and camera have the transport index Yellow-III label.

4. Full compliance was effected immediately after notice.

Since this company has the prior history and records of Met Chem Engineering Laboratories, Inc., and has and does hereby agree to undertake corrective action for defaults prior to the change in ownership, supplements its prior reply by answering those items that occurred prior to September 10, 1984, and reports from their records as follows:

ITEM 1 of the October 8th letter:

1. Admit that an employee received a dose of 1.84 rem.

2. Company had received prior work locations of employee but the safety officer, through inadvertence, did not verify the same.

3. Subsequently, the safety officer did check and with prior history documented that the employee, Mitch Robinson, could be exposed to radiation of 3.0 rem.

4. Although exposure was greater than permissible without knowledge of past history, when history was determined the exposure was within limits. Procedures have been changed and prior history is immediately verified.

ITEM 2 of the October 8th letter:

1. This violation also involves Mitch Robinson and the same circumstances referred to in Item 1.

2. Please refer to answer to Item 1.

ITEM 3 of the October 8th letter:

1. Admit that the three employees' examinations had not been graded and properly documented.

2. When examination grades were recorded, two of the parties passed and only one failed with a grade of 62%.

3. The violation as to two employees was only technical and the third employee would have been re-tested if the grades had been immediately recorded.

4. Procedural changes have been effected so that after testing the individual is not available for work until the radiation safety release form is completed, which form reflects a satisfactory grade and other required information.

ITEM 4 of the October 8th letter:

1. Admit that employee Jim Shupe was not provided a new film badge after exposure.

2. Company misunderstood rules and assumed that when the dose was determined to be to the badge only and not to the person, the Company could rely on the pocket dosimeter without immediate replacement of the badge by subtracting the difference between the badge and dosimeter.

3. The employee wrote the company a letter stating that he had not been exposed but that the badge had been exposed because he left his coat next to the operation in the heat of the day.

4. Operating procedures now require that any exposed badge be immediately surrendered and a new badge issued. This item is also received in annual training updates.

ITEM 5 of the October 8th letter:

1. Admit that an employee's badge in Evanston, Wyoming, received a reading of 3.37 rem and that a separate investigation was not made.

2. Directly after, with receipt of notice of the exposure, the company received an unsolicited letter from the employee stating that this exposure had been to the badge only and not to his body. Since the employee, without prompting, had immediately notified the company, it was assumed that further investigation was not required as it would be unlikely to reveal any additional or contrary facts and the company did not understand that the reference to a "survey" in the regulations required additional separate action.

3. Since the notice of the event corresponded with the receipt of an explanation of the event, no further notice or action was given or taken.

4. Since the employee in this case changed his story after the event, management is impressed with the necessity of immediate separate investigation and survey to completely document the event.

5. Corrective action has been implemented and any exposure now requires an immediate and separate survey, investigation and documentation.

ITEM 7 of the October 8th letter:

1. Admit that an internal inspection was not completed on the radiographer's assistant in April, 1984.

2. An inspection was completed in January, 1984, but on April 26, 1984, the employee was removed from radiography work, placed on visual inspection work at the Evanston High School which continued through the calendar quarter. The employee was therefore not inspected for the quarter commencing in April, 1984.

3. Quarterly inspections will continue to be made in the first month of each calendar quarter and all employees involved in radiography work during the inspection period will be inspected and audited.

4. Full compliance is obtained by the inspection process which is required to occur in the first month of each calendar quarter.

ITEM 8 of the October 8th letter:

1. Admit that an RG-SA-13 model source was used with a Gulf Nuclear 20 V camera.

2. Although the RG-SA-13 is not specifically authorized for this use, it is practically identical to the RG-13 which is authorized and no safety difference is involved! This is technical rather than a practical problem.

3. Corrective Action: in July, 1984, the Company has sold all Gulf Nuclear V 20 cameras.

Respectfully yours,

BIELE, HASLAM & HATCH

IRVING H. BIELE
Attorneys for Met-Chem Testing
Laboratories of Utah, Inc.

IHB:cd
cc: Region IV Office of the USNRC
Met-Chem Testing Laboratories of Utah, Inc.

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

MAY 15 1985

Docket No. 30-06589
License No. 45-09963-01
EA 85-04

Met Lab, Inc.
ATTN: Mr. Oscar Ward, III
President
605 Rotary Street
Hampton, VA 23661

Gentlemen:

SUBJECT: ORDER TO SHOW CAUSE WHY LICENSE SHOULD NOT BE REVOKED

Enclosed herewith is an Order providing you with an opportunity to show cause within 25 days after issuance of the Order why your materials license should not be revoked. Following review of your response, I will arrange a meeting to discuss this matter with you before I make a final decision.

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 the accompanying Order are not subject to the clearance procedures of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosure: Order to Show Cause
Why License Should Not Be Revoked

cc: Commonwealth of Virginia

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	License No. 45-09963-01
MET LAB, INC.	)	EA 85-04
605 Rotary Street	)	
Hampton, Virginia 23661	)	

ORDER TO SHOW CAUSE
WHY LICENSE SHOULD NOT BE REVOKED

I

Met Lab, Inc., 605 Rotary Street, Hampton, Virginia, 23661 (the "licensee") is the holder of a materials license issued by the Nuclear Regulatory Commission (the "Commission") pursuant to 10 CFR Part 30. The license, issued on November 2, 1982 and due to expire on June 30, 1987, authorizes the licensee to possess sealed sources for use in industrial radiography.

II

On June 7 and 27, 1984, an inspection of Met Lab, Inc. activities by the NRC Region II staff revealed that the licensee had not conducted its activities in full compliance with NRC requirements. A Notice of Violation (NOV) was issued to the licensee on July 5, 1984. One of the violations identified in the NOV was the failure of the licensee to perform annual radiation response checks on pocket dosimeters.

The licensee responded to the NOV by letter dated September 10, 1984, under signature of its President, Oscar W. Ward, III. In the licensee's response, the licensee denied the violation involving failure to make annual pocket dosimeter radiation response checks. The licensee stated that the pocket dosimeters had been checked but that the records had not been available for review because they had been filed incorrectly and could not be located during the inspection. As part of the denial, the licensee submitted a copy

of a record of three pocket dosimeter checks for correct response to radiation allegedly performed on January 21, 1984.

III

A review by the NRC Region II Staff of the record of checks submitted by the licensee indicated that the calculations in the record were incorrect and that the recorded dosimeter responses were based on these incorrect calculations. The NRC review indicated that the dosimeter response checks had not been performed as stated and that the report was a fabrication. On November 27, 1984, a special inspection and an Office of Investigations' (OI) inquiry were performed at the licensee's facility by a Region II inspector and a Region II OI investigator. As a result of the staff's further review of this matter, it appears that the licensee failed to apply the inverse square law governing the relationship between distance and exposure in calculating the change in dose rate versus distance from a point source. The dosimeter response checks listed in the record submitted on September 10, 1984 could not have been obtained with the source, distance, and exposure times used unless all three pocket dosimeters checked were each out of calibration by a factor of sixteen.

The licensee's President, Mr. Ward, told the NRC investigator that a mistake had been made in the calculations but maintained that the record had been made prior to the June inspections. Mr. Ward also acknowledged that there was no possible way that the results in the record could have been derived if the documented test had been conducted as indicated in the report. Mr. Ward provided no explanation of how the incorrect data came to be recorded.

On balance, the staff believes that the record of dosimeter response checks did not reflect any checks that were actually made but that the record was fabricated, apparently for the purpose of demonstrating compliance with a requirement against which Region II had cited a violation.

IV

Other circumstances indicate the licensee's lack of truthfulness in dealing with the Commission. On or about August 15, 1984, Mr. Ward informed the NRC Region II staff, by telephone, that the reason the licensee had not responded to the NOV issued on July 5, 1984 was because Mr. Ward could not find the NOV. Mr. Ward subsequently informed the NRC during the OI Inquiry performed on November 27, 1984 that this statement was false and that he had made the statement to gain more time to search for the missing dosimeter response check record. While Mr. Ward's false statement is not in itself of major significance (i.e., had he merely asked for additional time to respond to the NOV, additional time would have been granted in all likelihood), his conduct casts doubts about his candor and forthrightness in his dealings with the Commission.

V

Under Section 186 of the Atomic Energy Act of 1954, as amended, a license may be suspended or revoked for, among other things, a material false statement or a finding which would warrant the Commission to refuse to grant a license on initial application. As stated above, the licensee in its response to the NOV submitted a material false statement concerning dosimeter response checks by stating that it had complied with the requirement and submitting a false record to demonstrate compliance. The false record was material in that it could have influenced the NRC's consideration of the enforcement sanction in the NOV issued to the licensee on July 5, 1984 and the associated corrective action. The circumstances surrounding the submission of the false record indicate that Mr. Ward, the President of Met Lab, Inc., willfully submitted the false statement to the Commission. Mr. Ward also made a deliberately false statement concerning the delay in

responding to the NOV. The submission of false information and false records are conditions which would warrant the Commission's refusal to issue a license in the first place. Mr. Ward's conduct calls into question not only his candor in dealing with the Commission, but also his, and consequently the licensee's, ability and willingness to comply with the Commission's requirements. Normally, I would consider ordering the removal of the individual involved in the willful material false statement. However, I recognize that this might not be practical in the case of a two-man operation. If the licensee cannot demonstrate adequate cause why Mr. Ward should not be removed from licensed activities and cannot demonstrate that his removal from such activities would be possible, I will have no alternative but to revoke the license.

I have determined, therefore, that the licensee should be ordered to demonstrate why Met Lab, Inc. should be permitted to retain its license with Mr. Ward in a position of responsibility for licensed activities in light of Mr. Ward's conduct. Because the licensee's submission of the material false statement was willful, no notice pursuant to 10 CFR 2.201 is required.

VI

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 2.202, and Parts 30 and 34, IT IS HEREBY ORDERED THAT:

The licensee shall show cause, in the manner hereinafter provided, why License No. 45-09963-01 should not be revoked if Mr. Oscar Ward continues to conduct or have responsibilities for licensed activities.

VII

The licensee may show cause, within 25 days after issuance of this Order, as required by section VI., above, by filing a written answer under oath or affirmation setting forth the matters of fact and law on which the licensee relies. In demonstrating why the license should not be revoked the licensee may answer by providing that Mr. Ward will not have responsibility over or conduct any licensed activity. 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 above.

VIII

The licensee or any other person adversely affected by this Order 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. Copies shall also be sent to the Executive Legal Director at the same address and to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II, 101 Marietta Street, Suite 2900, Atlanta, Georgia 30323.

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. 45-09963-01 should be revoked.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 15th day of May 1985

MET LAB
INCORPORATED
605 ROTARY STREET, HAMPTON, VIRGINIA 23661 TELEPHONE 804 / 827-7176

In Reply Refer to:

8 June 1985

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

Dear Mr. Taylor:

RE: Docket No. 30-06589
License No. 45-09963-01
EA 85-04

Enclosed is the response of Met Lab, Inc. to the Order to Show Cause Why License Should Not be Revoked. Copies have been sent by mail to the Executive Legal Director and the Region II Administrator as directed in the order.

As an individual, Oscar W. Ward III, these proceedings have impugned my character and I have considered demanding a hearing as an individual who has been adversely affected by the order, independent of the action pursued by Met Lab, Inc. Since Met Lab, Inc. has requrested a hearing, if the response to the order is rejected, I will not request an additional hearing.

I believe that the response demonstrates sufficient justification not to revoke the license, and I have proposed action that could be taken to improve management of the regulatory records and administration of the radiation safety program.

I look forward to receiving your favorable action on the dismissal of these proceedings.

Sincerely,

O. W. WARD III
President

Enclosure: Response of Met Lab, Inc. to the Order
to Show Cause Why License Should Not be Revoked

cc. NRC Executive Legal Director
NRC Region II, Regional Administrator

BEFORE THE
U. S. NUCLEAR REGULATORY COMMISSION

In the Matter of MET LAB, INC. 605 Rotary Street Hampton, Virginia 23661	NRC Materials License No. 45-09963-01 EA 85-04

RESPONSE OF MET LAB, INC. TO THE
ORDER TO SHOW CAUSE WHY
LICENSE SHOULD NOT BE REVOKED

I

Met Lab, Inc. (the respondent) is a corporation of the Commonwealth of Virginia with one stockholder, its President, Oscar W. Ward, III, who is the firm's radiation safety officer.

II

The respondent did submit the hand written information dated January 21, 1984 (Exhibit 1) with the September 10, 1984 reply (Exhibit 2) to the U. S. Nuclear Regulatory Commission (NRC) Notice of Violation (NOV) dated July 5, 1984. The submission of Exhibit 1 was an error by the President in failing to check the attachments to the September 10, 1984 reply. The respondent denies that the submission of Exhibit 1 constituted a material false statement because (1) if it were represented to be the missing record for the annual dosimeter response check the errors are so obvious that it could not possibly influence a knowledgeable party; (2) only three out of twelve dosimeters owned by the respondent were included on Exhibit 1, therefore if the information were correct it would not have been sufficient to avert a citation for failure to maintain records demonstrating the performance of dosimeter response

checks pursuant to 10 CFR 34.33(c); (3) the President immediately recognized the errors when he reviewed Exhibit 1 during the NRC investigation inquiry on November 27, 1984, and upon recognizing the errors in Exhibit 1 he requested withdrawal of the September 10, 1984 response (Exhibit 2) and resubmitted a corrected response dated November 30, 1984 (Exhibit 3); and (4) Exhibit 1 was obviously not intended to be a record since it is on scratch paper and it was attached to a paper containing calculations pertaining to twin, full, queen and king size beds.

Anticipating that the dosimeter response check records would be located the President had prepared a rough draft response dated July 27, 1984 (Exhibit 4). This draft along with the NOV was temporarily misplaced. The missing draft response, NOV and what were thought to be the missing dosimeter response checks were later located by office personnel. Since the response was late the draft was hurriedly finalized and submitted by the President without thoroughly reviewing Exhibit 1.

Exhibit 1 is on a scratch sheet of paper approximately 7.25 inches long and it was attached to a full length sheet (Exhibit 5). The first page of Exhibit 5 is a draft form relating to exposure data, not specifically pertaining to dosimeter response checks. It presents the correct inverse square law formulation where I_1 is at unit distance, thereby demonstrating correct knowledge of the inverse square law. On the back page of Exhibit 5 are the calculations pertaining to twin, full, queen and king size beds. Evidence that Exhibit 5 was attached to Exhibit 1 when it was copied for submission to the NRC is provided by the lower portion of Exhibit 5 appearing at the bottom of

both pages of Exhibit 1 submitted to the NRC on September 10, 1985 (see Exhibit 6). A required regulatory record would not be maintained on less than a full length sheet of paper, and it would not be associated with calculations pertaining to bed sizes. The President believes that Exhibit 1 was intended to be a draft form for dosimeter response checks, and that the erroneous calculations were hurriedly performed to obtain typical numbers for laying out the form. It is to be noted that the activity of Ir-192 S/N 16089 (see Exhibit 7) is not correct on the sheet further substantiating that Exhibit 1 was simply a draft form or initial effort to set up a dosimeter response check and does not represent the actual data.

The President immediately recognized the errors in Exhibit 1, including the incorrect activity of the Ir-192 source, when it was called to his attention during the investigation inquiry on November 27, 1984. This demonstrates that he would have recognized the same errors if he had thoroughly reviewed Exhibit 1 prior to submitting the September 10, 1984 reply to the NOV. There is no administrator who completely reviews every submission from his office, and every administrator relies to some extent on clerical personnel to file, retrieve and submit documents. The President assumed responsibility for the erroneous submission, and has made every reasonable effort to honestly correct it.

The respondent would have no motive for submitting a record for only three out of twelve dosimeters, since the alleged violation would still exist for the remaining dosimeters. There is also lack of motive for submission of a false dosimeter check record since failure to maintain a

record of the dosimeter response check is a minor violation, and submission of a false record would result in more severe consequences as evidenced by the pending show cause order for license revocation.

III

The respondent categorically denies the allegation in Section IV of the May 15, 1985 Order To Show Cause Why License Should Not be Revoked that "Mr. Ward subsequently informed the NRC during the OI (Office of Investigations) Inquiry performed on November 27, 1984 that this statement was false and that he had made the statement to gain more time to search for the missing dosimeter response check record." The President will testify that a rough draft response to the NOV (Exhibit 4) was prepared on July 27, 1984. The rough draft response and the NOV were being held during the thirty day submission period while an attempt was made to locate the missing dosimeter response check records. It was during this thirty day submission period that the rough draft response and the NOV were misplaced. Without documentation to be reminded of the end of the thirty day submission period the matter was temporarily overlooked. Telephone records show that on August 27, 1984 the President called Region II, NRC to request a copy of the NOV so that another response could be prepared. Shortly thereafter the July 27, 1984 rough draft response and NOV were located and the September 10, 1984 response prepared. It is apparent that the OI investigator has misinterpreted the President's statement that the draft response and NOV were being held to gain more time for the search of the missing dosimeter response check records during the thirty day period provided for response to the NOV.

IV

The respondent is a small non-destructive testing company that utilizes only one radiography crew, who performs radiography no more than half the time. Industrial radiography is an adjunct to other non-destructive testing activities. Management of the company has remained constant for thirteen years. The compliance record during this period has been reasonable, except for one incident in the first quarter of 1981 resulting from a radiographer not reporting an offscale dosimeter. The President is the sole stockholder of the company. Since the company and the management are small the President can not be separated from the licensing and radiation safety responsibilities, nor, based on the above information, does there appear adequate justification to do so. The respondent recognizes that improvements could be made in the management of the regulatory records and administration of the radiation safety program. In a small organization it is most difficult to obtain the necessary perspective when there is a single administrator. In order to assist the President with the management of the regulatory records and administration of the radiation safety program the respondent proposes that if the license is not revoked that an independent audit be performed by a party acceptable to the NRC who will prepare recommendations and provide guidance on acceptable practices.

V

The respondent pleas that the above demonstrates sufficient cause not to revoke the license. If additional information or clarification is required it will be promptly provided upon request. If for any reason it is decided by the NRC to proceed with the revocation of the license the respondent requests a hearing pursuant to 10 CFR 2.202(b).

I do hereby affirm that the above is true and factual to the best of my knowledge.

Dated at Hampton, Virginia
this 10th day of June 1985.

MET LAB, INC.

Oscar W. Ward, III
President

Hampton, VA

Dated this 10th day of June 1985.

Joye Barnes, Notary Public

Commission Expires: 2/1/88

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

OCT 16 1985

Docket No. 30-06589
License No. 45-09963-01
EA 85-04

Met Lab, Inc.
ATTN: Mr. Oscar Ward, III
President
605 Rotary Street
Hampton, VA 23661

Gentlemen:

SUBJECT: FURTHER ACTIONS ON SHOW CAUSE ORDER AND ORDER MODIFYING LICENSE

We have reviewed your response of June 8, 1985 to the Order to Show Cause Why License Should Not Be Revoked dated May 15, 1985 and have met with you on October 8, 1985 to discuss the Order.

After careful consideration of your position, I have determined that adequate cause has been shown why your license should not be revoked as proposed in the May 15, 1985 Order to Show Cause, subject to the enclosed Order Modifying License. This decision is based upon the determination that you have made improvements in your program to comply with license requirements, and that the specific plans and commitments as described in your response and Section III of the enclosed Order, if implemented as described, are adequate to enable you to conduct future activities in compliance with Commission 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,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosure:
Order Modifying License

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
MET LAB, INC.	)	License No. 45-09663-01
605 Rotary Street	)	EA 85-04
Hampton, Virginia 23661	)	

ORDER MODIFYING LICENSE

I

Met Lab, Inc., 605 Rotary Street, Hampton, Virginia, 23661 (the "licensee") is the holder of a materials license issued by the Nuclear Regulatory Commission (the "Commission") pursuant to 10 CFR Parts 30 and 34. The license, issued on November 2, 1982 and due to expire on June 30, 1987, authorizes the licensee to possess sealed sources for use in industrial radiography.

II

On June 7 and 27, 1984, an inspection of Met Lab, Inc. activities by the NRC Region II staff revealed that the licensee had not conducted its activities in full compliance with NRC requirements. A Notice of Violation ("NOV") was issued to the licensee on July 5, 1984. One of the violations identified in the NOV was the failure of the licensee to perform annual radiation response checks on pocket dosimeters.

The licensee responded to the NOV by letter dated September 10, 1984 under signature of its President, Oscar W. Ward, III. In the licensee's response, the licensee denied the violation involving failure to make annual pocket dosimeter radiation response checks. The licensee stated that the pocket dosimeters had been checked but that the records had not been available for review because they had been filed incorrectly and could not be located

during the inspection. As part of the denial, the licensee submitted a copy of a record of three pocket dosimeter checks for correct response to radiation allegedly performed on January 21, 1984.

On November 27, 1984, a special inspection and an Office of Investigations' (OI) inquiry were performed at the licensee's facility by a Region II inspector and a Region II OI investigator. Based on the results of the special inspection and inquiry, an Order to Show Cause Why License Should Not Be Revoked (Order) was issued on May 15, 1985. The Order was issued because the NRC staff believed that the licensee in its response to the NOV fabricated the record of the pocket dosimeter checks. On June 8, 1985, the licensee responded to the Order. In the licensee's response, the licensee denied that the response to the NOV was fabricated and stated that the record in question was submitted by mistake. In addition, the licensee proposed that, if the license was not revoked, the licensee would agree to hire a consultant, approved by the NRC, to perform an independent audit and provide guidance on acceptable practices. I met with the licensee on October 8, 1985 in Bethesda, Maryland to discuss the response to the Order.

On the basis of an evaluation of the licensee's response and the meeting with the licensee on October 8, 1985, I have determined the licensee has shown adequate cause why Licensee No. 45-09963-01 should not be revoked and that the license should be modified to require implementation of the proposed improvements as set forth in Section III below. This decision is based upon a determination that the specific plans described in the licensee's response and the commitments which the licensee made during the October 8, 1985 meeting, including the

performance of audits by an independent consultant, should be adequate to enable Met Lab, Inc. to conduct future activities in compliance with NRC requirements.

III

In view of the foregoing and pursuant to Sections 81, 161b, and 161o of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and Parts 30 and 34, IT IS HEREBY ORDERED THAT:

The licensee shall have compliance audits conducted consisting of an initial audit and at least one follow-up audit. These audits shall be performed by an independent consultant approved by the Regional Administrator, NRC Region II. The initial audit shall be completed no later than March 30, 1986 and the second audit completed no later than September 30, 1986. Within thirty days after each audit, a written report of the audit findings shall be sent to the NRC Region II Regional Administrator at the same time it is sent to the licensee. Within sixty days of receipt of each of the audit reports, the licensee shall submit a report to the Region II Regional Administrator describing the corrective actions to be taken to implement the audit findings or provide justification for alternative corrective action or no corrective action if any specific audit finding is not adopted. This report shall also include a schedule for completion of the corrective action for each audit finding. At the completion of the second audit, the consultant shall provide a recommendation to the licensee and the NRC Region II

Regional Administrator on whether further audits are necessary. The NRC Region II Administrator may relax or terminate any of the preceding conditions for good cause shown.

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 expiration of the time within which a hearing may be requested or, if a hearing is requested, on the date specified in an Order issued following further proceedings on this Order.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland,
this 16th day of October 1985

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

SEP 16 1985

Docket No. 30-03137
License No. 37-11258-01
EA 85-93

Metro Health Center
ATTN: Mr. Luis Hernandez
Administrator
252 West 11th Street
Erie, Pennsylvania 16501

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY
(NRC INSPECTION REPORT 85-01)

This refers to the NRC safety inspection conducted on August 8, 1985 of activities authorized by NRC License No. 37-11258-01. The report of the inspection was forwarded to you on August 16, 1985. During the inspection, twelve violations of NRC requirements were identified. On August 22, 1985, we held an enforcement conference with you and members of your staff during which these violations, their causes, and your corrective actions were discussed.

The NRC is particularly concerned that most of the violations identified by the NRC inspector were previously identified during audits conducted by your consultant in March and June 1985; however, timely and comprehensive actions were not taken to resolve the violations. Of additional concern to the NRC is the fact that four of the ten violations identified during an NRC inspection of your facility in 1980 have recurred. The number and repetitive nature of the violations demonstrate the need for immediate management attention to the radiation safety program to ensure that deficiencies are promptly identified, and once identified, that prompt and lasting corrective action is taken.

To emphasize the need for such management attention, 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 Three Thousand Seven Hundred Fifty Dollars ($3,750) for the violations set forth in the enclosed Notice. The violations have been classified in the aggregate as a Severity Level III problem in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985) (Enforcement Policy). Although Violation A could by itself be classified at Severity Level III in accordance with

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Section C.1 of Supplement VI of the Enforcement Policy, the violations have been categorized in the aggregate at Severity Level III to focus on their underlying cause; namely, a lack of adequate management control of the radiation safety program. The base value of a civil penalty for a Severity Level III problem is $2,500. The escalation and mitigation factors in the Enforcement Policy were considered. The base civil penalty amount has been increased by 50% in accordance with Section V.B.4 of the Enforcement Policy because the hospital had knowledge of many of the violations as a result of previous NRC inspections and internal audits by your consultant, but the hospital did not take prompt and effective actions to correct the violations and prevent recurrence.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In addition, your response should describe the changes that have been or will be implemented to impr ve management control and oversight of your radiation safety program. In particular, please identify the actions taken to ensure that violations identified as a result of internal audits are promptly corrected. Your reply to this letter and the enclosures, and the results of future inspections, will be considered in determining whether further NRC 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)
Commonwealth of Pennsylvania

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Metro Health Center
Erie, Pennsylvania 16501

Docket No. 030-03137
License No. 37-11258-01
EA 85-98

An NRC inspection of activities authorized under NRC License No. 37-11258-01 was conducted on August 8, 1985. During the inspection, twelve violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1984, 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:

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. 10 CFR 20.207(b) requires that materials 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 the purpose of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above, during weekends for the time period of June 28, 1985 to August 8, 1985, licensed quantities of technetium-99m/molybdenum-99 contained in nuclear generators were routinely stored in an unlocked portable lead-lined box in an unlocked room in the emergency room center, and during those times, constant surveillance of the licensed material was not maintained.

B. Condition 17 of License No. 37-11258-01 requires that licensed material be possessed and used in accordance with statements, representations and procedures contained in the application dated August 6, 1982, and Appendix O of Regulatory Guide 10.8.

1. Item 10 of the application requires that the licensee possess an operable isotope dose calibrator and that if the activity displayed varies from the stated assay of the standard source by greater than ±5%, arrangements will be made for the immediate repair or adjustment of the dose calibrator.

Contrary to the above, as of August 8, 1985, the only dose calibrator possessed by the licensee had been functioning erratically for several months and routinely showed variations greater than ±100% of the stated assay, and as of August 8, 1985, arrangements had not been made for the repair or adjustment of the calibrator.

2. Item 10.B.3.b of the application requires that each day the dose calibrator is used, it be tested for constancy on all isotope settings with a cesium-137 standard.

   Contrary to the above,

   a. The dose calibrator was used during October 1984, but a constancy check was not performed on the days used;

   b. The dose calibrator was used regularly between January 1 to July 1, 1985, but constancy tests were only performed for 16 days during this period; and

   c. The dose calibrator was used on July 1, 2, 3, 5, 15, and 30 and on August 7, 1985, but constancy checks were not performed on those days.

3. Item 10.A of the application requires that all survey meters be calibrated annually, and that no survey meter be used beyond the anniversary date of its last successful calibration.

   Contrary to the above, as of August 8, 1985, the high level survey meter, a Victoreen 740F, S/N 2207, had not been calibrated since its last successful calibration, June 13, 1984.

4. Item 9 of this application requires that the licensee possess an operable Victoreen CDV-700 low-level survey meter or its equivalent.

   Contrary to the above, from February to June 19, 1985, the licensee did not possess an operable Victoreen CDV-700 low-level survey meter, nor its equivalent.

5. Item 7 of this application requires that the Radiation Safety Committee meet not less than quarterly to conduct its business.

   Contrary to the above, between May 1984 and July 30, 1985, the Radiation Safety Committee did not meet.

6. Appendix O, Item 1.b requires the licensee Radiation Safety Committee (RSC) to annually review the entire radiation safety program, including ALARA considerations.

   Contrary to the above, the RSC did not meet to review the entire radiation safety program, including ALARA considerations, for the year 1984.

7. Item 17 of this application requires that surveys be performed in accordance with the "Survey Procedures" contained in the application dated August 6, 1982. Item A of "Survey Procedures" requires daily radiation surveys of all elution, preparation and injection areas. Item D of "Survey Procedures" requires weekly G-M meter surveys and contamination wipe tests to be conducted in all laboratory areas.

   Contrary to the above,

   a. Between February 1985 and August 8, 1985, daily radiation surveys of elution, preparation and injection areas had not been conducted;

   b. Between November 30, 1984 and July 31, 1985, weekly G-M meter surveys and wipe tests were not performed in any of the laboratory areas;

   c. During the week of July 31, 1985 wipe tests were not performed; and

   d. As of August 8, 1985, surveys or wipe tests had not been conducted in the cardiac imaging room where millicurie quantities of technetium-99m are used.

8. Item 15.3 of this application requires that individuals who prepare doses of radiopharmaceuticals monitor their hands after each procedure and before leaving for the day.

   Contrary to the above, from February to July 1985, Nuclear Medicine technologists routinely failed to conduct personnel monitoring of their hands and clothing after each procedure and before leaving for the day.

9. Item 14 of this application requires that packages containing radioactive material be opened in accordance with the procedures in Appendix F of Regulatory Guide 10.8, Revision 1.

   Steps 2.c, 2.d and 2.f of Appendix F require that, when opening packages in which licensed material has been received, the exposure rate 3 feet from the surface of the package, and at the surface, be measured and recorded, and that the external surface of the final source container be wiped with a moistened cotton swab, held with forceps, and the cotton swab be assayed and the results recorded.

   Contrary to the above, for packages received between February through July 1985, none of the procedures specified in Appendix F, Steps 2.c, 2.d and 2.f were followed. In addition, surveys of packages received from August 1-8, 1985 did not include a wipe of the final source container for a contamination check.

10. Item 15 of this application requires that radioactive material be used in accordance with the "General Rules for Safe Use of Radioactive Materials" contained in Appendix G of Regulatory Guide 10.8.

    Item 6.a of Appendix G requires that each patient dose be assayed in the dose calibrator prior to administration.

    Contr ry to the above, on four occasions on March 7 and on three occasions on April 15, 1985, patient doses were not assayed in the dose calibrator prior to administration.

C. License Condition 16.B requires the licensee to monitor radioactive trash prior to disposal in the normal trash to demonstrate that radiation levels are at background level.

    Contrary to the above, radioactive trash disposed in the normal trash from October 17, 1983 to February 22, 1985 was not monitored prior to disposal to demonstrate that radiation levels were at background level.

Collectively, these violations have been categorized as a Severity Level III problem (Supplements IV and VI).

Cumulative Civil Penalty - $3,750 assessed equally among the violations.

Pursuant to the provisions of 10 CFR 2.201, the Metro Health Center 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 explanation or statement in reply, including for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation, if admitted, (3) corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and, (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Metro Health Center may pay the civil penalty by letter addressed to the Director, Office of Inspection and Enforcement, with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of Three Thousand Seven Hundred Fifty Dollars ($3,750) or may protest imposition of the civil penalty in whole or in part by a written answer addressed to the Director, Office of Inspection and Enforcement. Should Metro Health Center 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 Metro Health Center 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 addressed in Section V.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 parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Metro Health Center'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, 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

T. Murley

Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 16th day of September 1985

METRO HEALTH CENTER
252 WEST 11th STREET • ERIE, PENNSYLVANIA 16501 • 814/455-3961

October 10, 1985

Mr. Robert Burnett, Director
Division of Radiation Safety
and Safeguards
Office of Inspection
and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: NRC License #37-11258-01

Dear Mr. Burnett:

This letter is in response to a Notice of Violation and Proposed Imposition of Civil Penalty, dated September 16, 1985, regarding Metro Health Center, Erie, Pennsylvania. This Notice refers to the Nuclear Regulatory Commission safety inspection conducted on August 8, 1985 and subsequent enforcement conference held on August 22, 1985.

Metro Health Center does not deny that the alleged violations did occur. It is felt by this Hospital Administration that these alleged violations occurred due to the technical director of Nuclear Medicine, who received all reports and correspondence from our consultants regarding internal audits of the radiation safety program, and was working without direct administrative supervision. The technical director of Nuclear Medicine failed to apprise this administration or the radiation safety officer of the discrepancies noted in our consultants' quarterly reports. Administrative notification, initiated by our consultants, of essentially the same alleged violations noted in the Nuclear Regulatory Commission inspection conducted August 8, 1985, ultimately, resulted in the termination of the technical director of Nuclear Medicine.

Steps have been taken to avoid ever again letting this type of communication failure to take place within this institution. These items are listed below:

1) As mentioned previously, the technical director of Nuclear Medicine was terminated.

2) Our consultants, Nuclear Medicine Associates of Cleveland, Ohio have in the past and will continue in the future to provide an external means of monitoring the Nuclear Medicine program.

3) Presently, as a means of providing an internal check and balance system, Arthur B. Calabrese, Ph.D., D.O., M.D., Hospital Chairman of the Board; Luis A. Hernandez, Hospital Administrator; Raymond T. Kiendl, Technical Director of Radiology, Nuclear Medicine and Ultrasound; Paul Janicki, D.O., Director of Operations for Radiology Consultants, which provides physician coverage at Metro Health Center; and Jim Campbell, B.S., R.T.(N), the new Radiation Safety Officer, will receive copies of Nuclear Medicine Associates quarterly reports. This practice will continue until it can be verified that the program is maintaining appropriate compliance levels. When it is felt that this compliance level has been achieved, only the Hospital Administrator, Radiation Safety Officer and Technical Director of Radiology will continue to receive a copy of Nuclear Medicine Associates quarterly reports.

4) The administration of the technical component of the department has been reorganized by having a single Department of Radiology Services to include Radiology, Nuclear Medicine and Ultrasound.

5) Amendment #25 allows for a change in the Radiation Safety Officer to Jim Campbell, B.S., R.T.(N).

Other items in this response correspond alphabetically or numerically to the questions in the Nuclear Regulatory Commission Notice of Violation and Proposed Imposition of Civil Penalty letter dated September 16, 1985.

A) Arrangements have been made so that all radioactive materials received during off-duty hours are delivered directly to the designated receipt area located within the Nuclear Medicine Department.

Item #13, "Procedures for Ordering and Receiving Radioactive Materials," has been amended, per amendment #25, to reflect this new procedure. Under no circumstances will any by-product material be left in an unsecured, unrestricted area within the hospital.

B) 1. A new Capintec CRC-12 dose calibrator has been purchased, received, and placed into service. This equipment addition was reflected in application

dated September 5, 1985 of amendment #25.

2. The dose calibrator will be checked for constancy each day of use with a Cs-137 standard in accordance with Item #10.b.3.b. of license application dated August 5, 1982.

3., 4. A new Eberline E-520 survey meter has been purchased, calibrated and placed into service. Since this instrument has the capability of reading from 0 to 2000 mR/hr, it will be capable of serving as both a high and low level survey instrument. Calibration of the Victoreen 740-F high level survey meter was unsuccessful. However, this instrument, upon repair, will be recalibrated in order to assure that at least one functional, calibrated, high-level meter is available at all times. The Victoreen CDV-700 is operable and along with the new Eberline E-520 instrument, will assure that a calibrated, functional low-level meter will be available at all times.

5. The Radiation Safety Committee confirms that it will abide by Item #7 of license application dated August 6, 1982 and will meet not less than quarterly to conduct its business.

6. Appendix O, of Regulatory Guide 10.8, Revision 1, contained in application dated August 6, 1982 will be followed. A review of the entire radiation safety program, including ALARA consideration, was conducted by Management and the Radiation Safety Committee on August 21, 1985.

7. Survey procedures will be performed in all laboratory areas in accordance with Item #17 of license application dated September 5, 1985.

8. In letter dated September 16, 1985, Notice of Violation and Proposed Imposition of Civil Penalty, paragraph numbered "8" quotes Item #15.3 of application dated August 6, 1982 as stating that "Individuals who prepare doses of radiopharmaceuticals monitor their hands after each procedure and before leaving for the day." This quote is in error. Item #15.3 reads: "Individuals who prepare doses of radiopharmaceuticals shall monitor hands and clothing for contamination after each procedure or before leaving the area." The monitoring of hands and clothing will be performed in accordance with Item #15.3 of application dated August 6, 1982.

9. All packages containing radioactive materials will be opened in accordance with the procedures as contained in Appendix F of Regulatory Guide 10.8, Revision 1, and application dated August 6, 1982.

10. Item #15, Appendix G of Regulatory Guide 10.8, Revision 1, "General Rules for Safe Use of Radioactive Materials," contained in application dated August 6, 1982, will be followed. Specifically, Item 6.a of Appendix G that requires each patient dose to be assayed on a dose calibrator prior to administration will be followed.

C. License Condition 16.B requiring the licensee to monitor radioactive trash prior to disposal in the normal trash to demonstrate that radiation levels are at background levels will be followed.

All procedures as outlined in this letter have been implemented and, thus, correct all previous items of noncompliance.

I trust this letter of response adequately answers those items noted in Nuclear Regulatory Commission correspondence dated September 16, 1985. Should the Nuclear Regulatory Commission have any further questions or comments regarding this response, please do not hesitate to contact me.

Sincerely,

Luis A. Hernandez

Luis A. Hernandez
Administrator

cc: Mr. Thomas T. Martin, Director
Division of Radiation Safety
and Safeguards
Office of Inspection and Enforcement
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

METRO HEALTH CENTER
252 WEST 11th STREET • ERIE, PENNSYLVANIA 16501 • 814/455-3961

October 10, 1985

Mr. Robert Burnett
Division of Radiation Safety
and Safeguards
Office of Inspection
and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: NRC License #37-11258-01

Dear Mr. Burnett:

Metro Health Center of Erie, Pennsylvania in accordance with 10 CFR 2.205 wishes to protest the proposed civil penalty of $3,750 for the reasons listed in the following paragraphs:

While the Hospital did not exhibit appropriate management control of the Nuclear Medicine Department, it was not the intent to willfully and negligently circumvent requirements of the Nuclear Regulatory license conditions and/or regulations.

It is felt that an extenuating circumstance, in this case, was that the technical director of Nuclear Medicine - being the only individual to receive all correspondence and reports from our consultants - chose to act in an irresponsible manner. Although numerous items of noncompliance were noted by our consultants previous to the inspection conducted by your office on August 8, 1985, corrective action was not initiated due to said technical director, when questioned, professing that the program was functioning in an orderly manner. It was not until notification by our consultants in a letter dated June 17, 1985 that administration actually became aware of the situation. Once notified, steps were initiated to correct the deficiencies. These corrective actions, and documentation to support this claim, were presented at the Enforcement Conference held August 22, 1985 at Region I headquarters.

Steps have been taken to avoid ever again letting this type of communication failure to take place within this institution. These items are listed below:

1) The individual who was technical director of nuclear medicine was terminated.

2) Our consultants, Nuclear Medicine Associates of Cleveland, Ohio, have in the past and will continue in the future to provide an external means of monitoring the nuclear medicine program.

3) Presently, as a means of providing an internal check and balance system, Arthur B. Calabrese, Ph.D., D.O., M.D.; Hospital Chairman of the Board; Luis A. Hernandez, Hospital Administrator; Raymond T. Kiendl, Technical Director of Radiology, Nuclear Medicine and Ultrasound; Paul Janicki, D.O., Director of Operations for Radiology Consultants Associated, Incorporated, which provides physician coverage at Metro Health Center; and Jim Campbell, B.S., R.T.(N) the new Radiation Safety Officer, will receive copies of Nuclear Medicine Associates quarterly reports. This practice will continue until it can be verified that the program is maintaining appropriate compliance levels. When it is felt that this compliance level has been achieved, only the Hospital Administrator, Radiation Safety Officer and Technical Director of Radiology Services will continue to receive a copy of Nuclear Medicine Associates quarterly reports.

4) The administration of the technical component of the department has been reorganized by having a single Department of Radiology Services to include Radiology, Nuclear Medicine and Ultrasound.

5) Recently approved Amendment #25 allows for a change in the Radiation Safety Officer to Jim Campbell, B.S., R.T.(N).

6) Please refer to letter of response to Nuclear Regulatory Commission Notice of Violation and Proposed Imposition of Civil Penalty letter dated September 16, 1985 for other specific corrective actions which have been taken.

We are opposed to any imposed penalty based on the fact that Administration was unaware of the problem until notified by our consultants. Once notified, corrective action was initiated, although implementation was not complete at the time of inspection by your office. We do not feel that an escalation in the proposed civil penalty by fifty percent is justified based upon findings internally identified by our consultants, and administration being unaware of the situation at

the time of the findings. Metro Health Center, therefore, requests remission of the proposed penalty and, at the very least, mitigation if imposed.

We look forward to your response and openly invite your office to inspect our facility in the future to confirm our corrective actions.

If you should have any questions or comments regarding statements made in this letter, please do not hesitate to contact me.

Sincerely,

Luis A. Hernandez

Luis A. Hernández
Administrator

cc: Mr. Thomas T. Martin, Director
Division of Radiation Safety
and Safeguards
Office of Inspection and Enforcement
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

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

NOV 14 1985

Docket No. 30-03137
License No. 37-11258-01
EA 85-98

Metro Health Center
ATTN: Mr. Luis Hernandez
Administrator
252 West 11th Street
Erie, Pennsylvania 16501

Gentlemen:

Subject: Order Imposing a Civil Monetary Penalty

This refers to your two letters dated October 10, 1985, in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you with our letter dated September 16, 1985. Our letter and Notice described violations identified during NRC Inspection No. 85-01 conducted on August 8, 1985 at your facility.

In your response, you: (1) stated that you do not deny the cited violations, and (2) request remission of the proposed civil penalty, or, at the very least, mitigation of the proposed penalty, if imposed. After careful consideration of your response, we have concluded, for the reasons given in the enclosed Order and Appendix, that a sufficient basis was not provided for either mitigation or remission of the civil penalty. Accordingly, we hereby serve the enclosed Order on Metro Health Center, imposing a civil penalty in the amount of Three Thousand Seven Hundred Fifty Dollars.

As you indicated in your October 10, 1985 letter, we agree that the requirement in Item B.8 was incorrectly described in the Notice of Violation. The description of Item B.8 has been corrected in the enclosed Appendix to the Order and Item B.8 remains a violation.

The corrective actions described in your response will be reviewed during a subsequent inspection.

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

The response directed by the enclosed Order 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.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Enclosure:
Order Imposing a Civil Monetary Penalty with
Appendix - Evaluation and Conclusion

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
METRO HEALTH CENTER	)	Docket No. 30-03137
252 West 11th Sreet	)	License No. 37-11258-01
Erie, Pennsylvania 16501	)	EA 85-98

ORDER IMPOSING A CIVIL MONETARY PENALTY

I

Metro Health Center, Erie, Pennsylvania (the "licensee") is the holder of License No. 37-11258-01 (the "license") issued by the Nuclear Regulatory Commission (the "Commission" or "NRC") on September 8, 1965, which authorizes the licensee to use licensed materials to perform diagnostic and therapeutic medical procedures. The license expires on December 31, 1987.

II

An NRC safety inspection of the licensee's activities under the license was conducted on August 8, 1985. During the inspection, the NRC staff determined that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated September 16, 1985. The Notice states the nature of the violations, the provisions of the Commission's requirements that the licensee had violated, and the amount of the proposed civil penalty for the violations. Two responses, both dated October 10, 1985, to the Notice of Violation and Proposed Imposition of a Civil Penalty were received from the licensee.

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, the Director, Office of Inspection and Enforcement, has determined, as set forth in the Appendix to this Order, that the penalty proposed in the Notice of Violation and Proposed Imposition of Civil Penalty for the violations should be imposed.

III

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1984, 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 Three Thousand Seven Hundred Fifty Dollars ($3,750) 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, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

IV

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 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 as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty (as corrected in the Appendix), and

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

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 4th day of November 1985

APPENDIX

EVALUATION AND CONCLUSION

On September 16, 1985, a Notice of Violation and Proposed Imposition of Civil Penalty was issued to the licensee for twelve violations of NRC requirements. The licensee responded to the Notice in two letters, both dated October 10, 1985, and indicated that it did not deny that the violations occurred, but requested remission of the proposed penalty, or, at the very least, mitigation of the proposed penalty, if imposed. Provided below are (1) a restatement of each violation; (2) a summary of the licensee's response; and (3) the NRC evaluation of the licensee's response.

Restatement of Violations:

An NRC inspection of activities authorized under NRC License No. 37-11258-01 was conducted on August 8, 1985. The particular violations and the associated civil penalty described in the Notice of Violation and Proposed Imposition of Civil Penalty are restated (with a correction to Item B.8) 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. 10 CFR 20.207(b) requires that materials 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 the purpose of protection of individuals from exposure to radiation and radioactive materials.

   Contrary to the above, during weekends for the time period of June 28, 1985 to August 8, 1985, licensed quantities of technetium-99m/molybdenum-99 contained in nuclear generators were routinely stored in an unlocked portable lead-lined box in an unlocked room in the emergency room center, and during those times, constant surveillance of the licensed material was not maintained.

B. Condition 17 of License No. 37-11258-01 requires that licensed material be possessed and used in accordance with statements, representations and procedures contained in the application dated August 6, 1982, and Appendix O O of Regulatory Guide 10.8.

   1. Item 10 of the application requires that the licensee possess an operable isotope dose calibrator and that if the activity displayed varies from the stated assay of the standard source by greater than ±5%, arrangements will be made for the immediate repair or adjustment of the dose calibrator.

Contrary to the above, as of August 8, 1985, the only dose calibrator possessed by the licensee had been functioning erratically for several months and routinely showed variations greater than ±100% of the stated assay, and as of August 8, 1985, arrangements had not been made for the repair or adjustment of the calibrator.

2. Item 10.B.3.b of the application requires that each day the dose calibrator is used, it be tested for constancy on all isotope settings with a cesium-137 standard.

   Contrary to the above,

   a. The dose calibrator was used during October 1984, but a constancy check was not performed on the days used;

   b. The dose calibrator was used regularly between January 1 to July 1, 1985, but constancy tests were only performed for 16 days during this period; and

   c. The dose calibrator was used on July 1, 2, 3, 5, 15, and 30 and on August 7, 1985, but constancy checks were not performed on those days.

3. Item 10.A of the application requires that all survey meters be calibrated annually, and that no survey meter be used beyond the anniversary date of its last successful calibration.

   Contrary to the above, as of August 8, 1985, the high level survey meter, a Victoreen 740F, S/N 2207, had not been calibrated since its last successful calibration, June 13, 1984.

4. Item 9 of this application requires that the licensee possess an operable Victoreen CDV-700 low-level survey meter or its equivalent.

   Contrary to the above, from February to June 19, 1985, the licensee did not possess an operable Victoreen CDV-700 low-level survey meter, or its equivalent.

5. Item 7 of this application requires that the Radiation Safety Committee meet not less than quarterly to conduct its business.

   Contrary to the above, between May 1984 and July 30, 1985, the Radiation Safety Committee did not meet.

6. Appendix O, Item 1.b requires the licensee Radiation Safety Committee (RSC) to annually review the entire radiation safety program, including ALARA considerations.

Contrary to the above, the RSC did not meet to review the entire radiation safety program, including ALARA considerations, for the year 1984.

7. Item 17 of this application requires that surveys be performed in accordance with the "Survey Procedures" contained in the application dated August 6, 1982. Item A of "Survey Procedures" requires daily radiation surveys of all elution, preparation and injection areas. Item D of "Survey Procedures" requires weekly G-M meter surveys and contamination wipe tests to be conducted in all laboratory areas.

   Contrary to the above,

   a. Between February 1985 and August 8, 1985, daily radiation surveys of elution, preparation and injection areas had not been conducted;

   b. Between November 30, 1984 and July 31, 1985, weekly G-M meter surveys and wipe tests were not performed in any of the laboratory areas;

   c. During the week of July 31, 1985 wipe tests were not performed; and

   d. As of August 8, 1985, surveys or wipe tests had not been conducted in the cardiac imaging room where millicurie quantities of technetium-99m are used.

8. Item 15.3 of this application requires that individuals who prepare doses of radiopharmaceuticals monitor their hands after each procedure or before leaving the area.

   Contrary to the above, from February to July 1985, Nuclear Medicine technologists routinely failed to conduct personnel monitoring of their hands and clothing after each procedure and before leaving for the day.

9. Item 14 of this application requires that packages containing radioactive material be opened in accordance with the procedures in Appendix F of Regulatory Guide 10.8, Revision 1.

   Steps 2.c, 2.d and 2.f of Appendix F require that, when opening packages in which licensed material has been received, the exposure rate 3 feet from the surface of the package, and at the surface, be measured and recorded, and that the external surface of the final source container be wiped with a moistened cotton swab, held with forceps, and the cotton swab be assayed and the results recorded.

   Contrary to the above, for packages received between February through July 1985, none of the procedures specified in Appendix F, Steps 2.c, 2.d and 2.f were followed. In addition, surveys of packages received from August 1-8, 1985 did not include a wipe of the final source container for a contamination check.

10. Item 15 of this application requires that radioactive material be used in accordance with the "General Rules for Safe Use of Radioactive Materials" contained in Appendix G of Regulatory Guide 10.8.

    Item 6.a of Appendix G requires that each patient dose be assayed in the dose calibrator prior to administration.

    Contrary to the above, on four occasions on March 7 and on three occasions on April 15, 1985, patient doses were not assayed in the dose calibrator prior to administration.

C. License Condition 16.B requires the licensee to monitor radioactive trash prior to disposal in the normal trash to demonstrate that radiation levels are at background level.

    Contrary to the above, radioactive trash disposed in the normal trash from October 17, 1983 to February 22, 1985 was not monitored prior to disposal to demonstrate that radiation levels were at background level.

Summary of Licensee Response

The licensee states that it does not deny the occurrence of the violations cited in the Notice of Violation and Proposed Imposition of Civil Penalty, and admits that the hospital did not exhibit appropriate management control of the Nuclear Medicine Department. The licensee correctly notes that the requirement cited in Item B.8 was incorrectly described in the Notice as requiring hand monitoring by individuals preparing pharmaceuticals after each procedure and before leaving the area, whereas compliance with either practice alone is acceptable. The citation has been corrected above; however, individuals were not monitoring their hands as required, as the licensee admits and, thus, violation B.8 stands. However, the licensee requests remission of the proposed civil penalty, or at the very least, mitigation, if a penalty is to be imposed, for the following stated reasons:

- It was not the licensee's intent to willfully and negligently circumvent NRC requirements.

- Although the licensee's consultant had previously identified several of the violations during two previous audits and the violations remained uncorrected, escalation of the civil penalty by 50% for this reason was unjustified because of the extenuating circumstances in that hospital administration was unaware of the consultant's findings. Specifically, the Technical Director of Nuclear Medicine, who was working without direct administrative supervision, was the only individual who received correspondence and reports from consultants, and he chose to act irresponsibly in professing that the program was functioning in an orderly manner.

- Corrective steps have been taken to prevent these violations in the future, including terminating the employment of the Technical Director of Nuclear Medicine.

NRC Evaluation of Licensee Response

The licensee has not provided a sufficient basis for remission or mitigation of the civil penalty. Escalation of the base civil penalty by 50% was appropriate in accordance with Section V.B.4 of the NRC Enforcement Policy (10 CFR Part 2, Appendix C) because the licensee had information indicating that problems existed in the Nuclear Medicine Department as a result of the consultant's audits, but the problems were not corrected until after the NRC inspection. If the licensee had promptly responded to the audit findings and corrected the identified deficiencies, a civil penalty may not have been proposed since the NRC encourages self identification and correction of problems.

Although the Technical Director of Nuclear Medicine may have acted irresponsibly, as the licensee claims, in not responding to the consultant's findings, the licensee is responsible for the acts of their employees and therefore must provide adequate control and oversight of their employees to ensure adherence to requirements. Licensee management admittedly did not exhibit appropriate management control at the hospital. The results of the March 11, 1985 audit were sent to the licensee's Radiation Safety Officer, who is also the Chairman of the Board for the licensee, and no corrective actions were taken. Furthermore, although the hospital administration did, in fact, receive copies of the consultant's second audit in a letter dated June 17, 1985, many of the audit findings, although easily correctable, still existed at the time of the NRC inspection on August 8, 1985. Therefore, corrective actions, although comprehensive, were not prompt and therefore do not provide a basis for mitigation of the penalty.

Finally, the lack of willful intent to violate NRC requirements also does not provide a basis for mitigation of the civil penalty. If the violations were the result of willful actions, the severity level could have been increased in accordance with Section III of the Enforcement Policy, a higher civil penalty could have been proposed, and the responsible individual(s) would have been subject to criminal prosecution. The absence of willfulness does not make the proposed penalty any less appropriate under the Enforcement Policy.

NRC Conclusion

A sufficient basis was not provided for either mitigation or remission of the proposed civil penalty. Therefore, the NRC staff concludes that a civil penalty of $3,750 should be imposed.

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

FEB 21 1985

Nuclear Fuel Services, Inc.
ATTN: C. W. Taylor, President
600 Executive Boulevard, Suite 600
Rockville, Maryland 20852

Gentlemen:

SUBJECT: PROPOSED IMPOSITION OF CIVIL PENALTY AND ORDER MODIFYING LICENSE (EA 84-128)
(REFERENCE INSPECTION REPORT NO. 70-143/84-41)

A special inspection was conducted by the NRC Region II office during the period of October 5 - 18, 1984, of activities authorized by NRC License No. SNM-124 for the Nuclear Fuel Services (NFS) Erwin Facility. The purpose of the inspection was to review the circumstances surrounding the accumulation of special nuclear material (SNM) in the process ventilation system of the high enriched uranium (HEU) scrap recovery facility (200 Complex). At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the referenced inspection report. As a result of this inspection, significant failures to comply with NRC regulatory requirements were identified and, accordingly, an Enforcement Conference to discuss this matter was held in the Region II Office on October 29, 1984.

The violation identified as Item I in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty involves a failure to perform adequate investigations and take appropriate corrective actions, as required by the license, for violations of criticality safety action limits placed on the accumulation of uranium in components of the ventilation system. As a result of this failure, an amount of uranium was accumulated in the system which exceeded the criticality safety action limits specified in the license. Since the extent of this accumulation was unknown and unmonitored, it had not been measured and accounted for during physical inventories and was located outside of material access and material balance areas.

The NRC is concerned that a condition of degraded safety and safeguards existed for a significant period of time. We believe that if appropriate investigative and corrective actions had been taken when the criticality action limits were first violated, this degraded condition would have been avoided. We also believe that other indications existed in the operating history of the ventilation system which should have alerted NFS to the development of the degraded condition. These circumstances represent a failure of licensee management to exercise proper oversight of, and control over, plant operations.

To emphasize the seriousness of this violation, we are issuing the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Twenty Thousand Dollars ($20,000) for the violation described in the enclosed Notice.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The violation has been characterized at Severity Level II in accordance with the General Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984). No penalty was assigned to Item II in the enclosed Notice because it was categorized as a Severity Level IV violation and does not meet the criterion for a civil penalty for such violations under the NRC Enforcement Policy. It is, however, similar to a previous violation sent to you in a Notice dated May 25, 1983, and was also discussed in the Enforcement Conference. Thus, you should give particular attention to the identification and remedy of the root cause of the violation so its recurrence may be precluded.

In addition to the civil penalty, the NRC believes that further remedial action is needed to ensure that NFS improves management oversight of operations and initiates appropriate investigations when action limits are exceeded. Accordingly, the NRC is issuing the enclosed Order Modifying License at this time. The Order amends the license to require the licensee to expand the duties and responsibilities of the Internally Authorized Change Council (IAC Council).

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 planned with regard to ensuring that proper investigations are conducted of violations of action limits contained in your license, that adequate corrective actions are taken for causes of any limit violations, and that appropriate management oversight is exercised. In your response, appropriate reference to previous submittals is acceptable.

During the Enforcement Conference, certain commitments were made by you to NRC. These commitments are identified in the referenced inspection report in paragraph 12. If your understanding of the commitments is different from that stated, please inform the Region II office promptly.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosures will be placed in NRC's 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 the letter. Such application must be consistent with the requirements of §2.790(b)(1).

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 M. Taylor, Director
Office of Inspection and Enforcement

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Nuclear Fuel Services
Erwin Facility

Docket No. 70-143
License No. SNM-124
EA 84-128

The following violations were identified during an inspection conducted on October 5-18, 1984. In accordance with the General Statement of Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), 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:

I. Violation Assessed A Civil Penalty

License Condition No. 9, Authorized Use, requires that licensed material be used in accordance with the statements, representations and conditions contained in Sections 100, 200, 300, 400, 500, 700 and 1000 of the licensee's application dated August 30, 1976 and the Supplements thereto. Amendment No. 25, dated May 9, 1984, incorporates Section 1400, High Enriched U-235 Scrap Recovery - Building 233, of the application supplement dated March 30, 1984.

Subsection 1422.2.1.1, Ventilation System Tanks, establishes action limits for the accumulation of uranium-bearing solids in the ventilation system tanks and requires that corrective actions be taken whenever an action limit is exceeded, which includes performing investigations to determine the cause of the excessive Uranium-235 in the system, and correction of the identified problems.

Contrary to the above, investigations were not performed or were inadequately performed when criticality safety action limits were exceeded in the 200 Complex on July 30, twice on July 31, and on September 11, 14, 15, 16, and 20, 1984.

This is a Severity Level II violation (Supplement VI).
(Civil Penalty - $20,000)

II. Violation Not Assessed A Civil Penalty

10 CFR 20.201(b) requires that each licensee shall make such surveys as may be necessary for the licensee to comply with the regulations in 10 CFR Part 20 and are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

Contrary to the above, the licensee failed to perform adequate surveys for airborne radioactive material during portions of the work involving cleaning of the scrap recovery building scrubber performed on October 5 and 6, 1984, and on October 9, 1984, during the inspection of the catalyst chamber, in that:

a. No surveys were performed to determine that licensee employees' exposures to concentrations of radioactive material in air were in compliance with the limits of 10 CFR 20.103(a)(1), and

b. No surveys were performed to determine that the quantity of radioactive material in air released to the unrestricted area was in compliance with the limits of 10 CFR 20.106(a).

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

Pursuant to the provisions of 10 CFR 2.201, Nuclear Fuel Services, Inc. is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D. C. 20555, with a copy to the NRC 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, Nuclear Fuel Services, Inc. may pay the civil penalty in the amount of Twenty Thousand Dollars ($20,000) for the violation, or may protest imposition of the civil penalty in whole or in part by a written answer. Should Nuclear Fuel Services, 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 Nuclear Fuel Services, 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 addressed in Section V(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 Nuclear Fuel Services, Inc. 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 M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 21st day of February 1985

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of NUCLEAR FUEL SERVICES, INC. (Erwin, Tennessee)	)))	Docket No. 70-143 License No. SNM-124 EA 84-128

ORDER MODIFYING LICENSE

I

Nuclear Fuel Services, Inc. (the licensee) is the holder of Special Nuclear Material License No. SNM-124 which authorizes the licensee to possess and use special nuclear material at the fuel fabrication plant ir Erwin, Tennessee.

II

On October 5-18, 1984, a special NRC inspection was conducted to review the safety and safeguards concerns regarding the licensee's discovery of an accumulation of Uranium-235 in the 200 Complex ventilation system. As a result of this inspection, two violations were identified - failure to adequately investigate and determine the source of uranium-bearing solids in the ventilation system despite early indicators of Uranium-235 buildup in the ventilation system, and failure to perform adequate radiological surveys during ventilation system cleanout and subsequent investigation. These violations are described in greater detail in a Notice of Violation and Proposed Imposition of Civil Penalty issued this same date.

Operation of the new ventilation system for the 200 Complex began in March 1983. Within three months of startup, the licensee noted higher than expected levels of

Uranium-235 being accumulated in the scrubber and established action limits for the accumulation. Another early indicator of the buildup of uranium in the ventilation system also existed. In July 1983, a heat exchanger was removed and originally estimated to contain about 800 grams of Uranium-235. In May 1984, the license was amended to require the licensee to determine the amount of uranium in the scrubber and blowdown tank, and to take corrective actions when specified action limits were exceeded. Corrective actions include an investigation to determine the cause of exceeding the action limits and correcting the identified problem. (License Amendment No. 25) Between May 1984 and October 1984, these action limits were exceeded at least eight times (on July 30, twice on July 31, and on September 11, 14, 15, 16, and 20, 1984). In two cases no investigation was performed, and in the other cases, the investigation consisted of a form filled out by the production foreman with little or no followup by site management to determine the cause of the condition and no corrective actions to prevent recurrence.

On October 3 and 4, 1984, the licensee detected uranium concentration in the venturi scrubber solution which exceeded the action level and release limits. On October 4, 1984, Nondestructive Assay (NDA) measurements of the venturi scrubber and the blowdown tank showed a buildup of solids containing Uranium-235 which exceeded the 50 gram action limit. Repeated flushings of the system with water did not reduce the accumulation below the action limit. Consequently, the system was shut down, the solution was drained from the scrubber and the inspection port coverplate was removed for a visual inspection of the scrubber internals.

A buildup of solids containing uranium on the wall of the scrubber and on the surfaces of the venturi above the water level was observed. Solids were also observed to have accumulated in the bottom elbow of the S-shaped duct where the air enters the scrubber. NDA measurements of the system revealed approximately 1000 grams of Uranium-235 in the venturi scrubber and 1000 grams of Uranium-235 in the S-shaped duct leading to the scrubber. A criticality analysis performed by the licensee indicated that the cleaning operation could be safely undertaken.

Cleaning of the ventilation system was conducted on October 6 and 7, 1984, after preparation of a procedure and further discussions with NRC. The NRC resident inspector observed and monitored the licensee's activities. After the licensee removed the scrubber top, a worker was placed inside the scrubber to perform the cleaning. During the cleaning of the scrubber, the NRC resident inspector noted and informed the licensee that no air sampling was being performed to determine personnel exposure to airborne uranium and that the operation was being performed without enclosures to prevent releases of airborne radioactivity to the environment. The licensee acknowledged the inspector's concerns and initiated collection of high volume, lapel, and continuous air samples, and used enclosures to prevent further releases to the environment.

After reassembly of the scrubber, the removed materials, which had been placed in safe geometry bottles, were measured as containing 1610 grams of Uranium-235. An additional 598 grams of Uranium-235 were removed from the scrubber in the solution batches of October 3, 4, and 5, 1984. In conjunction with the restarting of the ventilation system, an investigation was initiated by the licensee to determine the causes of the accumulation of Uranium-235.

Preliminary findings from the licensee's investigation indicate that the material removed from the system was a mixture of effluents from essentially all processes in the scrap recovery operation. The most significant sources were the scrap furnace and the scrap dissolvers. In addition, the licensee determined that HEPA filters on the process equipment may have leaked, and a potential existed for liquid to enter the ventilation ducting because of inadequate siphon breaks.

III

The failure of the licensee to recognize early warnings that significant quantities of U-235 were being entrained in the ventilation system, and the lack of an adequate investigation of the sources of this material and subsequent remedial action to stop the sources resulted in: (1) accumulation of Uranium-235 in excess of the quantity required to form a minimum critical mass although in nonfavorable geometry, (2) the failure to include special nuclear material in the ventilation system on the inventory records, and (3) failure to perform adequate surveys which resulted in inadequate determination of the airborne radioactivity concentrations to which workers were exposed and which were released to an unrestricted area.

Collectively, these occurrences at the facility represent inadequate planning, design, and control of operational activities involving radiation safety hazards, safeguards controls, and the potential for nuclear criticality.

These occurrences are indicative of programmatic deficiencies in related management controls, and they demonstrate the need for an oversight safety group such as the Licensee's Internally Authorized Change (IAC) Council to prevent similar occurrences. Accordingly, the staff has determined that the IAC Council's function should be enlarged to include the review of all health and safety activities, and selected safeguards activities, and that the license should be modified to clarify the licensee's responsibility to conduct adequate investigations.

IV

In view of the foregoing and pursuant to Sections 53, 161(b), 161(o), and 182 of the Atomic Energy Act of 1954 as amended, and the Commission regulations in 10 CFR 2.204 and 10 CFR Part 70, IT IS HEREBY ORDERED THAT the license is modified to add the following new license conditions:

1. In addition to the membership specified in subsection 250.5 of the license application, dated July 6, 1983, the IAC Council shall include the Managers of Licensing and Safeguards, and of Security.

2. In addition to the requirements specified in subsection 250.1 of the license application dated July 6, 1983, the IAC Council shall review and evaluate all changes to the facility or facility operations which could affect material control and accounting or physical security. As used

herein, "facilities" includes but is not limited to: buildings, process equipment with SNM and support systems, nuclear and non-nuclear storage areas (internal and external), landscaping, etc.

3. In addition to the requirements specified in subsection 250.4 of the license application dated July 6, 1983, the IAC Council shall document its review of all proposed changes, conducted pursuant to subsection 250.1 of the license application and Condition 2 above, in a summary report describing the technical basis for accepting the analysis of the change. At a minimum, the report shall contain:

   a. a description of the proposed change(s), as well as equipment and location (e.g., building number) involved in the change;

   b. the nuclear criticality safety and radiation safety analyses performed by the Nuclear Safety Specialist and Health Physics Analyst respectively and any other supporting analyses presented to the IAC prior to the IAC meeting;

   c. issues discussed by the IAC Council; and

   d. the IAC's recommendation concerning the proposed change.

4. In addition to the IAC Council functions outlined in Section 250 of the license application dated July 6, 1983, the IAC Council shall meet at least every three months to:

a. review reports of all health and safety inspections and audits which the license requires be conducted, the semi-annual employee exposure and effluent reports specified by license condition No. 30, and the annual safeguards reviews and audits specified by 10 CFR 70.58(c)(2) and 73.46(g)(6).

b. review all violations of regulations and license conditions and any unusual events having safety significance, and associated investigation reports. Particular attention should be paid to the corrective actions taken and follow-up evaluations conducted to measure the effectiveness of these corrective actions; and

c. provide the Plant Manager, and corporate management as appropriate, with written reports of its findings and recommendations within 20 working days of its meetings. The recommended actions shall include recommendations as to how corrective actions and improvements should be accomplished. The responsibility for assuring that necessary corrections and improvements are completed remains with plant or corporate management. The IAC reviews described in section a. above of annual safeguards reviews and audits may satisfy the requirements for reporting to plant and corporate management specified in 10 CFR 70.58(c)(2) and 73.46(g)(6).

5. Notwithstanding the note to Figure 211-1 on page 10 of the application dated October 1, 1984, no individual who performs the initial safety analysis for a proposed change can participate as a member of the IAC Council which reviews that change.

6. The word "investigation" as used in the license application or license conditions is defined as an inquiry to establish the facts and circumstances associated with the matter of interest and to make recommendations for improvement or corrections. Such an investigation shall:

   a. be initiated and completed as soon as practical after the discovery of the event; and

   b. be under the direction of a person designated by the Plant Manager or the Safety and Decommissioning Manager, as appropriate.

7. Investigations shall be documented in written reports which shall as a minimum:

   a. include a determination of the cause(s) of the event;

   b. include recommendations for immediate and long-term corrective actions to prevent recurrence; and

   c. be retained for 5 years.

8. If any provision of this Order conflicts with any other condition of the license, the provisions of this Order will be controlling and will supersede the license conditions with which they conflict.

V

The licensee or any other person whose interest is adversely affected by this Order may request a hearing on this Order. Any request for hearing shall be submitted to the Director, Office of Inspection and Enforcement, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, within 30 days of the date of this Order. A copy of the request shall also be sent to the Executive Legal Director at the same address and to the Regional Administrator, Region II, 101 Marietta Street, N.W., Atlanta, Georgia 30323.

If a hearing is to be held concerning this Order, the Commission will issue an Order designating the time and place of hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order shall be sustained.

This Order shall become effective upon expiration of the time during which a hearing may be requested or, in the event that a hearing is requested, on the date specified in an order issued following further proceedings on this Order.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 21st day of February 1985

Nuclear Fuel Services, Inc. 6000 Executive Boulevard, Suite 600, Rockville, Maryland • 20852

(301) 770-5510

Charles W. Taylor
President

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

May 22, 1985

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

Attention: Mr. James M. Taylor, Director

Reference: (1) Docket 70-143; SNM-124
(2) Enforcement Action 84-128
Notice of Violation and Proposed Imposition of Civil Penalty (Transmitted by leter from J. M. Taylor to C. W. Taylor dated February 21, 1985)
(3) Letter from NFS (Erwin) to NRC dated May 22, 1985

Gentlemen:

Pursuant to 10 CFR 2.205, NFS protests the imposition of the proposed civil penalty of $20,000 set forth in Reference (2). NFS is allegedly in violation for failing to perform or for performing inadequate investigations at cited times. In Reference (3), Attachment A, response to Violation I, Sections 1 and 2, NFS sets forth the reasons why it believes that the investigations performed by NFS should not be considered inadequate. The fact that the buildup of uranium in the Process Ventilation System occurred cannot by itself establish that the investigations were not adequate and/or not conducted in accordance with the existing license requirements. Whether or not investigations are adequate requires a subjective determination and, therefore, all the circumstances as set forth in Reference (3), Attachment A, response to Violation I, must be considered. In summary, NFS did identify the cause of the problem, did take immediate corrective actions, and is taking the necessary steps to prevent recurrence. Neither a violation nor a penalty is warranted.

In the alternative, NFS requests that the proposed civil penalty be mitigated on the basis of the prompt, extensive and responsive corrective actions taken by NFS when the cause of the problem was identified. The details of NFS' actions are set forth in Reference (3), Attachment A, response to Violation I, Sections 3 and 4, in the Incident Report dated October 23, 1984, a Preliminary Investigative Report, also dated October 23, 1984, and in the monthly status reports to the NRC dated (a) November 30, 1948, (b) January 2, 1985, (c) January 31, 1985, (d) February 28, 1985, (e) March 29, 1985, (f) April 30, 1985.

At your convenience, NFS is prepared to discuss further any matters set forth or referenced above.

Sincerely,

Charles W. Taylor
President

CWT:jnw

cc: Dr. J. Nelson Grace
Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street, N. W.
Atlanta, Gerogia 30323

30G85-0167
GOV-01-55-04
RESPONSE
INSP84-128

Nuclear Fuel Services, Inc. ERWIN, TENNESSEE 37650

NFS

(615) 743-9141

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

May 22, 1985

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

Attention: Mr. James M. Taylor, Director

Reference: (1) Docket 70-143; SNM-124
(2) Enforcement Action 84-128
Notice of Violation and Proposed Imposition of Civil Penalty (Transmitted by letter from J. M. Taylor to C. W. Taylor dated February 21, 1985)
(3) Inspection Report No. 70-143/84-41
(Transmitted by letter from J. P. Stohr to F. K. Guinn dated February 21, 1985)

Gentlemen:

Pursuant to Reference (2), in accordance with the requirements of 10 CFR 2.201, Nuclear Fuel Services, Inc., (NFS) encloses Attachment A which (1) admits or denies the alleged violations; (2) the reasons for the violations 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.

Sincerely,

F. K. Guinn

F. K. Guinn
Plant Manager

/mlr

cc: Director, USNRC-Region II

F. K. Guinn states that he is Plant Manager of Nuclear Fuel Services, Inc., Erwin Plant, and that to the best of his knowledge, information and belief the facts set forth in Attachment A to this letter dated May 22, 1985 are true.

Sworn to and subscribed before me this 22nd day of May 1985.

Ruth B. Saits 5/22/85
Notary Public

My commission expires March 5, 1986.

ATTACHMENT A
To Letter Dated May 22, 1985
F. K. Guinn to J. M. Taylor

I. Alleged Violation Assessed a Civil Penalty

License Condition No. 9, Authorized Use, requires that licensed material be used in accordance with the statements, representations and conditions contained in Sections 100, 200, 300, 400, 500, 700 and 1000 of the licensee's application dated August 30, 1976 and the supplements thereto. Amendment No. 25, dated May 9, 1984, incorporates Section 1400, High Enriched U-235 Scrap Recovery-Building 233, of the application supplement dated March 30, 1984.

Subsection 1422.2.1.1, Ventilation System Tanks, estalishes action limits for the accumulation of uranium-bearing solids in the ventilation system tanks and requires that corrective actions be taken whenever an action limit is exceeded, which includes performing investigations to determine the cause of the excessive uranium-235 in the system, and correction of the identified problems.

Contrary to the above, investigations were not performed or were inadequately performed when criticality safety action limits were exceeded in the 200 Complex on July 30, twice on July 31, and on September 11, 14, 15, 16, and 20, 1984.

This is a Severity Level II Violation (Supplement VI) (Civil Penalty - $20,000).

NFS Response

(1) NFS concurs that the details contained in the Inspection Report (Reference C) are as stated. We do not believe, however, that the investigations performed should be considered inadequate.

(2) NFS identified, investigated, and took corrective action to the buildup of uranium in the High Enriched Scrap Plant's Process Ventilation System on its own initiative as early as July 1, 1983. At that time, NFS informed the NRC Resident Inspector of NFS' findings and corrective actions which were included in his routine inspection report for August, 1983. As a result, the NRC (NMSS) visited the site, reviewed the scrubber operational data, and directed that NFS apply for a license amendment to include the corrective action NFS had already implemented in July, 1983 as license conditions. NFS applied in March 1984 for the license amendment and it was granted by the NRC on May 9, 1984.

Beginning with the installation of the new process ventilation system in March 1983, the nuclear criticality concerns (and therefore the measurement points) centered around the unsafe geometry vessels and tanks. The ducting itself was not considered, by either NFS or the NRC because it had been designed with appropriate air velocities to preclude the build-up of solids. The NRC position regarding these concerns is stated in the NRC's Safety Evaluation Report for Amendment No. 25 (May, 1984).

Because NFS detected and measured uranium in the scrubber vessel cone and solutions on cited dates, it was assumed that the system was functioning as designed. Additionally, because it is a process ventilation system which is intended to remove and collect air entrained uranium, NFS concluded that it was serving its intended purpose. During the periods cited from July through September 1984, NFS concluded that entrainment of uranium in air and removal in the scrubber system was a normal operation and that the flushing of the cone was appropriate control action.

In summary, it should be recognized that: (1) the purpose of the process ventilation system was to remove entrained uranium solids from the airstream; (2) the solids were intended to be removed in the scrubber cone; (3) the air velocities system was designed to prevent settling and accumulation of solids in the duct and (4) the buildup in the duct was caused by an unsuspected surface depression. Therefore, NFS concludes that its investigations and corrective actions were consistent with reasonable practices.

(3) In order to preclude the buildup of solids in the duct work, NFS took many corrective actions of which the NRC has been informed. Specifically, these actions are documented in the following:

a. Incident Report (Transmitted by letter from F. K. Guinn to R. G. Page dated October 23, 1984),

b. Preliminary Investigation Report (Transmitted by letter from F. K. Guinn to USNRC, Region II dated October 23, 1984,

c. Monthly Status Report (Transmitted by letter from F. K. Guinn to James P. O'Reilly dated November 30, 1984),

d. Monthly Status Report (Transmitted by letter from F. K. Guinn to James P. O'Reilly dated January 2, 1985),

e. Monthly Status Report (Transmitted by letter from F. K. Guinn to James P. O'Reilly dated January 31, 1985),

f. Monthly Status Report (Transmitted by letter from F. K. Guinn to Dr. J. Nelson Grace dated February 28, 1985),

g. Monthly Status Report (Transmitted by letter from F. K. Guinn to Dr. J. Nelson Grace dated March 29, 1985,

h. Monthly Status Report (Transmitted by letter from F. K. Guinn to Dr. J. Nelson Grace dated April 30, 1985.

The primary immediate and near term corrective actions taken have been.

- The process and ventilation was immediately shut down for thorough inspection and cleanout.

- Frequent and extensive non-destructive assay (NDA) are being performed with action limits to monitor any buildup.

- An Engineering Team was established to determine the source(s) of airborne solids so that long-term Engineering controls could be designed.

- The duct depression was eliminated.

(4) To provide for more comprehensive investigations of any unusual events and to enhance management oversight of plant operations, NFS has made effective as of May 22, 1985, the conditions as set forth in Section IV of the NFS proposed modified order submitted by NFS to the NRC on April 22, 1985. NFS will utilize these conditions regarding IAC Council at least until it receives from the NRC a response to its April 22, 1985 letter.

Additionally, the Engineering design work which is being taken to prevent recurrence of the buildup of solids began in November 1984 and is still in progress. The principle sources of duct contamination were identified to be the tray dissolution and the calcining operations. The corrective steps include:

- The particulates entering the process ventilation system from the calciner will be reduced by installation of a cyclone separator, if approved by license amendment, and by increasing the operating temperature of the afterburner.

- The tray dissolver housings have been redesigned and the new housings are now ready for installation.

- Numerous other minor modifications have been made as described in NFS monthly reports referenced in (3) above.

(5) NFS believes that full compliance has been achieved.

II. Alleged Violation Not Assessed A Civil Penalty

10 CFR 20.201(b) requires that each licensee shall make such surveys as may be necessary for the licensee to comply with the regulations in 10 CFR Part 20 and are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

Contrary to the above, the licensee failed to perform adequate surveys for airborne radioactive material during portions of the work involving cleaning of the scrap recovery building scrubber performed on October 5 catalyst chamber, in that:

A. No surveys were performed to determine that licensee employees' exposures to concentrations of radioactive material in air were in compliance with the limits of 10 CFR 20.103(a)(1), and

B. No surveys were performed to determine that the quantity of radioactive material in air released to the unrestricted area was in compliance with the limits of 10 CFR 20.106(a).

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

NFS Response

(1) NFS concurs that no physical surveys were performed to determine either employee exposure or unrestricted area release concentrations.

(2) The reason that the violation occurred was that NFS interpreted the relevant sections of 10 CFR Part 20 as permitting an evaluation in situations involving low-level concentrations of uranium such as was encountered in this instance where the indicated personnel exposure and environment releases would not be expected to exceed the levels where monitoring was required. Although this evaluation method would not provide direct and positive evidence that such exposures and/or releases have not occurred, secondary monitoring (e.g., bioassays and environmental air samples) would confirm the exposure or release levels. It is now our understanding that the regulatory position is that this type of situation requires direct measurement as opposed to evaluations. NFS is complying accordingly in situations which require radiation work permits.

(3) In order to prevent recurrence, the following personnel have been reinstructed in the requirements of Radiation Work Permits and in acceptable confinement and air sampling techniques.

Health & Safety Manager
Environmental Affairs Manager
Health Physics Analyst (2)
Radiation Monitor Supervisors (2)
Criticality & Licensing Specialist
Decommissioning Project Manager

The reinstruction was performed by the Safety & Decommissioning Manager. Topics covered were temporary confinement techniques, establishment of temporary contaminant control points, breathing zone air sampling, personnel contamination survey, and bioassays required.

(4) The Safety & Decommissioning Department staffing has been increased to permit greater in-plant reviews and assessments. In January 1985, a nuclear engineer was hired to assist the Criticality & Licensing Supervisor. In March, two Radiation Monitor Supervisors were added so that all work shifts can be covered by NFS personnel qualified to perform evaluation of conditions and events for the assessment of radiological significance. These Radiation Monitor Supervisors are now undergoing training and will be on shift by June if security authorizations are granted. In addition, the Decommissioning Project Manager has been assigned to coordinate special Health Physics Appraisal projects. We believe this increased staffing will permit more in-depth reviews and evaluations of measurement data as well as allow for more in-plant time to observe and audit plant safety.

(5) NFS believes that with the above actions full compliance is achieved.

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

OCT 18 1985

Nuclear Fuel Services, Inc.
ATTN: Mr. F. K. Guinn
Plant Manager
Erwin, Tennessee 37650

Gentlemen:

Subject: Revised Order Modifying License: EA 84-128 (Reference Inspection Report No. 70-143/84-41)

This refers to our letter of February 21, 1985 which transmitted a Proposed Imposition of Civil Penalty and Order Modifying License, EA 84-128. A meeting between NRC representatives and NFS staff was held on April 1, 1985. During this meeting your staff expressed a desire to modify and in some cases clarify the proposed license conditions contained in our February 21, 1985 proposed enforcement action. NRC and NFS agreed that NFS would submit suggested changes to the proposed license conditions. Your letter dated April 22, 1985 transmitted those suggested changes.

After consideration of your suggested changes, the NRC provided a draft revised Order to you incorporating the changes to the license conditions which the staff was prepared to make. We met with you on October 11, 1985 and reached final agreement on the terms of the Order. Accordingly, in light of the intent of our original proposed enforcement actions, the NRC is issuing the enclosed Revised Order Modifying License.

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

The response directed by this letter and the enclosed Order are not subject to the clearance procedures of the Office of Management and Budget, issued under the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosure: Revised Order Modifying License

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	Docket No. 70-143
NUCLEAR FUEL SERVICES, INC.	)	License No. SNM-124
Erwin, Tennessee	)	EA 84-128

REVISED ORDER MODIFYING LICENSE

I

Nuclear Fuel Services, Inc. (the licensee) is the holder of Special Nuclear Material License No. SNM-124 which authorizes the licensee to possess and use special nuclear material at the fuel fabrication plant in Erwin, Tennessee.

II

On October 5-18, 1984, a special NRC inspection was conducted to review the safety and safeguards concerns regarding the licensee's discovery of an accumulation of Uranium-235 in the 200 Complex ventilation system. As a result of this inspection, two violations were identified - failure to adequately investigate and determine the source of uranium-bearing solids in the ventilation system despite early indicators of Uranium-235 buildup and failure to perform adequate radiological surveys during ventilation system cleanout and subsequent investigation. These violations are described in greater detail in a Notice of Violation and Proposed Imposition of Civil Penalty issued February 21, 1985.

Accompanying the Notice of Violation was an Order Modifying License, issued the same date. The Order described the circumstances surrounding the violations, their consequences, and proposed additional license conditions which the NRC viewed as necessary to ensure adequate planning, design, and control of operational activities at the Erwin Facility. By its terms, the Order was to become effective upon expiration of the time during which a hearing might be requested on the Order, or in the event a hearing was requested, on the date

specified in an order issued following further proceedings. Several extensions of time were granted to the licensee to respond to the Order Modifying License.

III

On April 1, 1985 NRC staff members met with representatives of the licensee to discuss issues relevant to this enforcement action. During this meeting the licensee expressed a desire to modify and clarify in some cases the license conditions proposed by the February 21st Order. The NRC agreed to consider modifications to the proposed license conditions if the licensee proposed them.

The licensee responded to the Order in a submittal dated April 22, 1985 and proposed certain modifications to the staff proposed license conditions. At the same time, the licensee made a contingent request for a hearing, which served to stay the effectiveness of the Order.

After careful consideration of the licensee's proposed modifications, the staff determined that some modification of the proposed license conditions was warranted. Discussions between the staff and the licensee resulted in agreement as to the clarifying modifications to be made to the license conditions proposed by the February 21st Order. The licensee has agreed to the imposition of these conditions and to withdraw its contingent request for a hearing. Accordingly, this Order modifies the previous Order and sets forth the license conditions that will now be included in the license.

IV

In view of the foregoing agreement between the Staff and the licensee, and pursuant to Sections 53, 161(b), 161(o), and 182 of the Atomic Energy Act of 1954 as amended, and the Commission's regulations in 10 CFR 2.204 and 10 CFR Part 70, IT IS HEREBY ORDERED THAT License No. SNM-124 is modified to add the following new license conditions:

1. In addition to the membership specified in Subsection 250.5 of the license application dated July 6, 1983, the IAC Council shall include the Materials Manager and the Security Manager. The Plant Manager may appoint appropriate qualified alternates to the IAC to participate in IAC Council meetings if IAC members are absent from the site during the meeting.

2. In addition to the requirements specified in Subsection 250.1 of the license application dated July 6, 1983, the IAC Council members shall review and evaluate, prior to implementing, all changes to the facility or facility operations which affect material control and accountability or physical security. As used therein, "facility" includes but is not limited to: buildings, process equipment with SNM and support systems, nuclear and non-nuclear storage areas (internal and external), landscaping, etc. For material control and accountability or physical security matters, the

IAC may satisfy these requirements by either individual review or collectively at a meeting provided, however, that individual members of the IAC continue to have the authority to request a meeting of the IAC on any given matter.

3. In addition to the requirements specified in Subsection 250.4 of the license application dated July 6, 1983, the IAC Council shall document its review of changes, conducted pursuant to Subsection 250.1 of the license application and Condition 2 above, in a summary report describing the technical basis for accepting the change. At a minimum, the report shall contain:

   a. a description of the IAC approved change(s), as well as equipment and location (e.g., building number) involved in the change;

   b. for approved changes, the nuclear criticality safety and radiation safety analyses performed, if any, by the Nuclear Safety Specialist and Health Physics Analyst respectively and any other supporting analyses presented to the IAC;

   c. issues discussed by the IAC Council; and

   d. the IAC's recommendation concerning the proposed change.

4. In addition to the IAC Council functions outlined in Subsection 250 of the license application dated July 6, 1983, the IAC Council shall meet at least quarterly to:

a. review reports of health and safety inspections and audits which the license requires be conducted, the semiannual employee exposure and effluent reports specified by License Condition No. 30, and the annual safeguards review and audits specified by 10 CFR 70.58(c)(2) and 73.46(g)(6);

b. review all violations of regulations and license conditions and any unusual events having safety significance, and associated investigation reports. Particular attention should be paid to the corrective actions taken and follow-up evaluations conducted to measure the effectiveness of these corrective actions; and

c. provide the Plant Manager and corporate management as appropriate, with written reports of its findings and recommendations within 20 working days of each meeting. The recommended actions shall include recommendations as to how corrective actions and improvements should be accomplished. The responsibility for assuring that necessary corrections and improvements are completed remains with plant or corporate management. The IAC Council reviews described in section a. above of annual safeguards reviews and audits may satisfy the requirements for reporting to plant and corporate management specified in 10 CFR 70.58(c)(2) and 73.46(g)(6).

5. Notwithstanding the note to Figure 211-1 on page 10 of the application dated October 1, 1984:

   a. The individual who participates as the Health and Safety Manager on the IAC Council shall not report directly or indirectly to the individual who performs the initial radiation safety evaluation of the proposed change.

   b. The individual who performs the independent nuclear criticality safety review for the proposed change, as required by Subsection 303(c) of the license, shall not report directly or indirectly to the individual who performs the nuclear criticality safety evaluation required by Subsection 303(c). The person performing the independent review shall have, as a minimum, the qualifications specified in Subsection 231.3.2.2. Proposed changes presented to the IAC in accordance with Subsection 250 of the license shall include the nuclear criticality safety evaluation and the independant review.

6. The word "investigation" as used in the license application or license conditions is defined as an inquiry to establish the facts and circumstances associated with the matter of interest and to make recommendations for improvement or corrections. Such an investigation shall:

a. be initiated and completed as soon as practical after the discovery of the event; and

b. be under the direction of a manager designated by the Plant Manager.

7. Investigations shall be documented in written reports which shall as a minimum:

a. include a statement regarding the cause(s) of the event;

b. include recommendations for immediate and long-term corrective actions to prevent recurrence; and

c. be retained for 5 years.

8. If any provision of the Order conflicts with any other condition of the license, the provisions of this Order will be controlling and will supersede the license conditions with which they conflict.

V

The license conditions contained herein shall become effective upon issuance of this Order.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 18th day of October 1985

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

NOV 27 1985

Nuclear Fuel Services, Inc.
ATTN: Mr. C. W. Taylor, President
600 Executive Boulevard, Suite 600
Rockville, Maryland 20852

Gentlemen:

SUBJECT: ORDER IMPOSING CIVIL MONETARY PENALTY: EA 84-128
(INSPECTION REPORT NO. 70-143/84-41)

This refers to two letters of May 22, 1985 by Mr. C. W. Taylor and Mr. F. K. Guinn in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you with our letter of February 21, 1985. The violation, which was brought to the attention of the NRC staff on October 5, 1984, resulted in an NRC special inspection of activities authorized by NRC License No. SNM-124 on October 5-18, 1984 at the Erwin facility.

After careful consideration of your responses to the alleged violation for which a civil penalty was proposed, we have concluded, for the reasons presented in the Appendix attached to the enclosed Order, that the violation occurred as stated in the Notice of Violation and that, because of the amount of uranium buildup involved, the severity level remains as cited in the Notice of Violation. However, upon further consideration of your corrective actions which we believe were extensive and comprehensive although not particularly prompt, a 25% reduction in the base civil penalty has been made. Accordingly, we hereby serve on Nuclear Fuel Services, Inc. the enclosed Order Imposing a Civil Monetary Penalty in the amount of Fifteen Thousand Dollars ($15,000). We will examine the implementation of your corrective actions during future 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 enclosed Order will be placed in the Public Document Room.

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

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Encl: Order Imposing Civil Monetary
Penalty with Appendix

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	Docket No. 70-143
NUCLEAR FUEL SERVICES, INC.	)	License No. SNM-124
(Erwin Plant)	)	EA 84-128
	)	

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Nuclear Fuel Services, Inc., (the "licensee") is the holder of Special Nuclear Materials License No. SNM-124 (the "license") issued by the Nuclear Regulatory Commission ("NRC" or "Commission") on March 16, 1979. The license authorizes the licensee to use special nuclear materials in accordance with the conditions specified therein.

II

A special inspection of the licensee's activities was conducted on October 5-18, 1984. The results of this inspection indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated February 21, 1985. The Notice states the nature of the violation, the requirements of the Commission that were violated, and the amount of the civil penalty proposed for the violation. The licensee

responded to the Notice of Violation and Proposed Imposition of Civil Penalty with two letters dated May 22, 1985.

III

Upon consideration of Nuclear Fuel Services, Inc.'s responses and the statements of fact, explanation, and argument regarding mitigation contained therein, the Director, Office of Inspection and Enforcement, has determined, as set forth in the Appendix to this Order, that the penalty proposed for the violations described in the Notice of Violation and Proposed Imposition of Civil Penalty should be reduced by 25% and a civil penalty of $15,000 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 Fifteen Thousand Dollars ($15,000) 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, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, 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, Washington, D.C. 20555.

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

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

(a) whether the licensee was in violation of the Commission's requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty referenced in Section II above and

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

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland,
this 27th day of November 1985.

Appendix

Evaluation and Conclusions

The violation and associated civil penalty was identified in the Notice of Violation and Proposed Imposition of Civil Penalty dated February 21, 1985. The Office of Inspection and Enforcement's evaluation and conclusions regarding the licensee's responses dated May 22, 1985 are as follows:

Restatement of Violation

License Condition No. 9, Authorized Use, requires that licensed material be used in accordance with the statements, representations and conditions contained in Sections 100, 200, 300, 400, 500, 700 and 1000 of the licensee's application dated August 30, 1976 and the Supplements thereto. Amendment No. 25 dated May 9, 1984, incorporates Section 1400, High Enriched U-235 Scrap Recovery-Building 233, of the application supplement dated March 30, 1984.

Subsection 1422.2.1.1, Ventilation System Tanks, establishes action limits for the accumulation of uranium-bearing solids in the ventilation system tanks and requires that corrective actions be taken whenever an action limit is exceeded, which includes performing investigations to determine the cause of the excessive Uranium-235 in the system, and correction of the identified problems.

Contrary to the above, investigations were not performed or were inadequately performed when criticality safety action limits were exceeded in the 200 Complex on July 30, twice on July 31, and on September 11, 14, 15, 16, and 20, 1984.

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

(Civil Penalty - $20,000)

NFS Response

Nuclear Fuel Services, Inc. (NFS) agreed that the details contained in the Inspection Report were correctly stated but believed that the investigations which were performed should be considered adequate and protested the imposition of the proposed civil penalty. As background, NFS stated that it had identified, investigated, and taken corrective actions on its own initiative when elevated levels of uranium were detected in the exhaust scrubber solution in 1983 after the ventilation upgrade was installed and that it had informed the resident inspector. As a result, representatives from the Office of Nuclear Materials Safety and Safeguards visited the site, reviewed the scrubber operational data, and requested that NFS submit its corrective actions in a license amendment application. The license was amended requiring that an investigation, among other requirements, be performed to determine the cause of the excessive uranium in the system when action limits were exceeded.

According to NFS, when the new process ventilation system was installed in 1983, the licensee's nuclear criticality concerns centered around unsafe geometry vessels and tanks. The ducting was not considered in the nuclear criticality safety analysis because the ducting had been designed with appropriate air velocities to preclude the buildup of solids. NFS stated that it had assumed that the system was functioning properly when uranium was detected in the scrubber cone and scrubber solution in 1984, and it considered flushing of the cone to be an appropriate control action. The buildup of solids in the duct was not suspected because of system design. As a result, NFS concluded that its investigations and corrective actions were consistent with reasonable practices.

NRC Assessment

Amendment 25 (May 9, 1984) to Special Nuclear Material License No. SNM-124 requires the licensee to take the following corrective actions whenever an action limit for excessive uranium in the ventilation system tanks is exceeded:

1. If the uranium concentration exceeds 0.03 grams per liter the blowdown solution must be drained. (Current procedures for diluting and resampling of the solution prior to discharge to the WWTF must be followed.)

2. If the NDA measurement exceeds 50 grams U-235, the tank must be immediately drained, flushed, and/or cleaned until the scan value falls below the action limit.

3. An investigation to determine the cause of the excessive uranium in the system must be performed.

4. Identified problems must be corrected.

5. The Criticality and Licensing Supervisor must be notified.

6. Measurements, sample analysis, corrective actions, and investigations must be documented.

On two occasions when the action limits were exceeded (September 14 and 15, 1984) NFS failed to perform investigations. On six other occasions (July 30, twice on July 31, and September 11, 16 and 20, 1984), NFS failed to conduct adequate investigations to determine the cause, and to correct identified problems when limits were repeatedly exceeded.

The licensee's investigations were documented on an internal form titled "Unusual Situation Investigation Report." There was no indication that NFS's management pursued the cause of excessive uranium buildup or recommended any corrective action beyond what is contained in the investigation reports.

The results of the investigations as recorded by the licensee were as follows:

July 30, 1984: Upon discovering that the venturi scrubber scan value had exceeded the action limit established by the license, NFS flushed the scrubber cone four times until the blowdown tank was full. However, the

licensee did not identify the cause of the incident or indicate what actions could be taken to prevent the situation from recurring.

July 31, 1984 (midnight): Upon discovering that the scrubber cone was scanning high, the licensee attempted to flush the cone but was unable to do so because the blowdown T-2 and T-3 tanks were full. The licensee discontinued use of the scrap furnace (although the investigation report states scrubber) until blowdown tank capacity was available to flush the scrubber tank. Both the cause of the situation and actions to prevent recurrence were listed as unknown.

July 31, 1984 (day shift): Upon discovering that the scrubber blowdown tank scanned 14,174 counts (which exceeded the acceptable limit), the licensee called the lab to get sample results of the hold tanks. After the T-3 tank was emptied, the licensee pumped the blowdown tank to the T-3 tank and continued to flush out the tank until the amount of uranium was below limits. However, the cause of the incident was not identified and no actions were taken to prevent the situation from recurring.

September 11, 1984: When the venturi scrubber cone scanned high, the air flow on the furnace was checked. The reading was 145 linear feet per minute, an acceptable flow rate. The scrubber cone was then flushed to the blowdown tank. The licensee listed the cause of the situation as unknown, and failed to identify actions which could be taken to prevent the situation from recurring.

September 16, 1984: Upon discovering that the blowdown tank was high, the tank was washed out and re-scanned. The cause of the problem was attributed to a build-up on the walls of the tanks, however, no actions were taken to prevent the situation from recurring.

September 20, 1984: Licensee representatives stated that the action limit was exceeded and an investigation may have been performed; however, there is no report to document this investigation. There is also no indication that the licensee identified either the cause of the incident or actions which could be taken to prevent the situation from recurring.

As indicated from the above summaries, none of the investigations attempted to determine the root cause of the excessive uranium in the system, e.g., why the rate of buildup of uranium in the cone was greater than had been anticipated. The investigations were inadequate in that they did not at least examine (1) the extent to which material was being introduced into the system, (2) the extent to which material was being deposited in the system, (3) whether the existing NDA measurements program was adequate and, (4) the validity of NFS's assumption that the ventilation system had been appropriately designed and was properly functioning. The failure to pursue these issues led to the continued buildup of uranium in the scrubber and in the ducting leading to the scrubber. Since the root cause of the problem was not identified, no corrective actions were taken, as required by License Amendment 25, to solve the identified problems. This failure is evident

from the licensee's own investigation reports, which describe no actions to prevent recurrence of the uranium buildup. Merely flushing the scrubber tank to reduce quantities to below the license limits without determining the cause of repeatedly exceeding the limits does not constitute sufficient corrective action to abate the continuing buildup of the excessive uranium in the system. In all events, flushing the tank is an action separately required by License Amendment 25. The staff recognizes that the license condition is expressly applicable only to the ventilation system tanks and not the duct work. However, License Amendment 25 requires that once the levels of uranium exceed stated action limits, the licensee must undertake an investigation to determine the cause of the problem, whatever the source. Continued instances of exceeding the action limits should have caused the licensee to investigate systems other than the tank itself to determine the cause of the problem in the ventilation system tanks.

The corrective measures and controls instituted by the licensee when above normal concentrations were detected in the scrubber solution in 1983 were commendable but have no relevance to the adequacy of the investigations required by License Amendment 25, which was issued in 1984. If adequate investigations had been performed to determine the cause of exceeding the license limits and appropriate corrective actions had been taken, material would not have continued to accumulate on the upper walls of the scrubber until October 5, 1984, when it was found to exceed the safe wet mass quantity for an unsafe geometry vessel.

The severity level for the violation was predicated on the quantity of material found in both the S-shaped duct and the scrubber walls above the waterline with the recognition that each area was of significant concern. In addition, management failed to become involved, as would be expected, to an extent sufficient to call for comprehensive investigations that would have determined the root cause of exceeding the license limits and could have prevented the continuation of material buildup. Accumulating amounts of uranium 235 in excess of safe wet mass quantities in an unsafe geometry vessel is of very significant regulatory concern. Therefore, the severity level for this violation is appropriately classified as a Severity Level II.

An evaluation of the eight documents referenced in the May 22, 1985 response reveals that after the October 5, 1984 incident, the licensee conducted an investigation to identify the potential sources of the uranium buildup and to provide information upon which near-term and long-term corrective actions could be based. The cited documents further reveal that the licensee finally took extensive and comprehensive steps towards the identification and elimination of the sources of excessive uranium buildup. These actions included increased surveillance and detection for accumulations and sources, engineering evaluations for possible sources, modifications of existing systems to reduce sources and accumulations, and review of nuclear criticality safety of tanks and unsafe geometry vessels. Although the NRC does not consider the initiation of corrective actions to be prompt, the NRC considers 25% mitigation of the proposed civil penalty appropriate in view of the licensee's extensive and comprehensive corrective actions.

Conclusions

Of the eight cited instances where action limits were exceeded, no investigations were conducted in two instances and the investigations of the other six instances were inadequate because reasonable efforts were not made to determine the cause of exceeding the limits and to take appropriate corrective actions.

The Severity Level II violation was predicated on the fact that an accumulation of uranium in excess of a safe wet mass actually occurred in an unsafe geometry vessel and safety margins continued to decrease because of the inadequate investigations. Such an incident is a serious nuclear criticality safety event.

Although the base civil penalty for a Severity Level II is $20,000, the licensee's extensive and comprehensive corrective actions after the discovery of the accumulation warrant a 25% reduction of the civil penalty amount. Therefore, a civil penalty of $15,000 is imposed.

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

JUL 03 1985

Docket No. 030-00882
License No. 29-05185-24
EA 85-70

Princeton University
ATTN: Mr. Anthony Maruca
Vice President for
Administrative Services
1 Nassau Hall
Princeton, New Jersey 08544

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC INSPECTION 85-01)

This refers to the NRC inspection conducted on May 23, 1985 of activities authorized by NRC License No. 29-05185-24. The report of the inspection was forwarded to you on June 7, 1985. The inspection was conducted to review the circumstances associated with a violation of NRC requirements identified and reported by the licensee involving the exposure of the skin of an individual to radiation in an amount five times in excess of the regulatory limit. During the inspection, two other violations of NRC requirements were identified. On June 14, 1985 we held an enforcement conference with you and members of your staff during which these violations, their causes, and your corrective actions were discussed.

The exposure in excess of the regulatory limit occurred after the individual opened a vial containing millicurie quantities of phosphorus-32. The individual did not wear a lab coat during the opening, as required, and did not perform a contamination survey of his person and clothing upon completion of opening the vial. Approximately 6 hours later, another individual identified contamination in the area, and surveyed the individual who was subsequently decontaminated.

This incident is of serious concern to the NRC because use of a lab coat and performance of a survey might have prevented the excess exposure. The violations demonstrate the importance of understanding and adhering to NRC requirements to assure safe performance of licensed activities. The NRC is also concerned that as of the date of the enforcement conference, comprehensive long-term corrective actions, such as upgrading of procedures and training associated with the safe handling of radioactive materials, had not been initiated to prevent recurrence of the incident.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

To emphasize the importance of understanding and adhering to NRC requirements so as to prevent such exposures, 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 ($4,000) for the violations set forth in the enclosed Notice. The violations have been categorized in the aggregate as a Severity Level II problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), because the exposure was greater than five times the regulatory limit. The base value of a civil penalty for a Severity Level II problem is $4,000. Although consideration was given to mitigating the penalty because of your prompt identification and reporting of the violation, your good enforcement history, and prompt evaluation of the dose to the individual, mitigation is considered inappropriate because of the magnitude of the exposure and the fact that timely, comprehensive, long-term corrective action to prevent recurrence had neither been planned nor initiated at the time of the enforcement conference.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the 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 w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Princeton University
Princeton, New Jersey

Docket No. 030-00882
License No. 29-05185-24
EA 85-70

On May 23, 1985 an NRC inspection of activities authorized under NRC License No. 29-05185-24 was conducted to review the circumstances associated with a violation of NRC requirements reported to the NRC on May 17, 1985. The violation involved a radiation exposure to the skin of an individual in an amount in excess of five times the regulatory limit. During the inspection, two other violations of NRC requirements were identified. They involved the failure to wear a laboratory coat and the failure to perform a survey. The use of a laboratory coat and the performance of a survey might have prevented the the excess exposure.

In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, ("Act"), 42 U.S.C 2282, PL 96-295 and 10 CFR 2.205. The particular violations and the associated civil penalties are set forth below:

A. 10 CFR 20.101(a) requires that no licensee possess, use, or transfer licensed material in such a way as to cause an individual to receive a dose to the skin of the whole body in excess of 7.5 rems per calendar quarter.

Contrary to the above, on May 7, 1985, phosphorus-32, a licensed material, was used in such a way as to cause an individual to receive a dose to the skin of the whole body of approximately 38 rems, a dose in excess of five times the stated limit for the second calendar quarter of 1985.

B. Condition 19 of License No. 29-05185-24 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in the Princeton University Radiation Safety Guide, dated December 1979.

1. Paragraph 10.E of this guide, "Personal Surveys," requires thorough checks of one's person and clothing for contamination following the physical or chemical manipulation of radioisotopes.

Contrary to the above, on May 7, 1985, an individual did not perform a check (survey) of his person and clothing for contamination following the manipulation of radioisotopes involving the opening of a vial containing 1.8 millicuries of phosphorus-32.

2. Paragraph 10.G of this guide, "Protective Clothing," requires that laboratory clothing be worn wher handling more than 200 microcuries of phosphorus-32 in open form.

   Contrary to the above, on May 7, 1985, an individual did not wear laboratory clothing while handling 1.8 millicuries of phosphorus-32 in open form.

Collectively, these violations have been categorized as a Severity Level II problem (Supplements IV and VI).

Cumulative Civil Penalty - $4,000 (assessed equally among the violations).

Pursuant to the provisions of 10 CFR 2.201, Princeton University is hereby required to submit to the Director, Office of Inspection and Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator, United States Nuclear Regulatory Commission, Region I, 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. If an adequate reply is not received within the time specified in this Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Princeton University may pay the civil penalties by letter addressed to the Director, Office of Inspection and Enforcement, with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of Four Thousand Dollars ($4,000) or may protest imposition of the civil penalties in whole or in part by a written answer addressed to the Director, Office of Inspection and Enforcement. Should Princeton University 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 Princeton University 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, such answer may request remission or mitigation of the penalties.

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

parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Princeton University's attention is directed to the other provisions of 10 CFR 2.205 regarding the the procedure for imposing civil penalties.

Upon failure to pay the civil 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 M. Allan

Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 23 day of July 1985

Princeton University VICE PRESIDENT FOR ADMINISTRATIVE AFFAIRS
ONE NASSAU HALL, PRINCETON, NEW JERSEY 08544

July 29, 1985

Docket No.: 030-00882
License No.: 29-05185-24
EA85-70

Director
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir or Madam:

This letter is submitted as a written answer to protest the imposition of the civil penalties in accordance with 10 CFR 2.205 and the instructions contained in the "Notice of Violation and Proposed Imposition of Civil Penalties" sent by the Regional Administrator, Region I of the Nuclear Regulatory Commission on July 3, 1985, and is to advise you that Princeton University requests remission of the entire $4,000 proposed penalty for the reasons set forth in this letter.

Pursuant to the instructions contained in the subject Notice of Violation we respond below to the five factors addressed in Section V.B of 10 CFR Part 2 Appendix C, as follows:

Regarding Section V.B.1

We submit that we did promptly identify and report the incident. Our position regarding this requirement is supported by Region I as evidenced in the letter which transmitted the subject Notice of Violation. Consequently, we believe this requirement has been met.

Section V.B.2

It is our position that prompt and effective corrective action to prevent a recurrence of this incident and similar incidents was taken. In support of this position, we refer to the information provided in our response pursuant to 10 CFR 2.201, a copy of which accompanies this document. See

Page 3, Section (3), (4) and (5) through first sentence on page 5.

Section V.B.3

It is our position that we do have a good enforcement history, a point also conceded in the Region I letter which transmitted the Notice of Violation. Consequently, we believe this requirement has been met.

Section V.B.4

We have had no knowledge of a similar problem as a result of a license audit nor have we received a specific NRC or industry notification. Consequently, we believe this requirement has no bearing on this particular incident or our situation.

Section V.B.5

The requirement with respect to multiple occurrences is not relevant to the incident in question.

Thus, we believe that we have met the criteria established in 10 CFR Part 2 Appendix C Section V.B.

In addition, and in further support of our request, we direct your attention to the letter from Region I which transmitted the Notice of Violation and which states that mitigation had been considered but was not deemed appropriate because, in part, "... timely, comprehensive, long-term corrective action to prevent a recurrence had neither been planned or initiated at the time of the enforcement conference" (June 14, 1985). We disagree. While none of our attendees at the enforcement conference recall being specifically asked the question, "What long-range plans have you initiated to prevent a recurrence?" our attendees do feel that a number of the remarks made by them during the conference should have clearly indicated that long-range planning and initiatives were under consideration toward the end of strengthening the Radiation Safety Program in general and in order to prevent a recurrence of this sort of incident. Our attendees did inform the Region I staff that changes in our training program, in the requirements for attendance at such programs and an active review of our enforcement procedures were

all under consideration. These plans, while admittedly preliminary at that time, were discussed with the Region I staff. In addition, there was an extended discussion of our enforcement philosophy and technique.

Further, the specific corrective actions we had taken prior to the inspection on May 23 were also known to the Region I staff and as stated in our response we believe those steps were adequate to prevent a recurrence of this specific incident and of similar incidents. Thus, it is our position that long-range comprehensive initiatives had been under active consideration prior to the enforcement conference.

Finally, this is the only incident of this nature and severity which has occurred in over 23 years during which Princeton University has operated under a broad license. Never having experienced an event of this nature and never having benefitted from an "Enforcement Conference," we were understandably uncertain as to what the Commission's position or expectations would be, particularly with respect to long-term actions. More important, nothing in our rather extensive dealings with the Region I staff suggested any sense of urgency on their part with respect to long-term corrective actions. Indeed, following the inspection on May 23, during the exit interview, the Region I inspector complimented the University on its prompt identification, response, and handling of the incident.

In view of the above, we request remission of the entire $4,000 proposed penalty. If remission of the entire penalty is not possible, then we request reduction of 50 percent as described in 10 CFR 2 Appendix C V.B.1 in recognition of our prompt identification and reporting of this incident. Your prompt and favorable consideration of this request will be appreciated.

Sincerely yours,

A. J. Maruca
Vice President for
Administrative Affairs

AJM/JCF:kv

cc: Radiation Safety Committee
Committee on Occupational Safety & Health
Professor E. C. Cox
Professor P. Schedl

Princeton University VICE PRESIDENT FOR ADMINISTRATIVE AFFAIRS
ONE NASSAU HALL, PRINCETON, NEW JERSEY 08544

July 29, 1985

Docket No. 030-00882
License No. 29-05185-24 Re: Inspection No. 85-01

Director, Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir or Madam:

Pursuant to 10 CFR 2.201, this is in response to the letter of July 3, 1985, from the Regional Administrator of Region I of the Nuclear Regulatory Commission, which we received on July 8, 1985. That letter summarizes the observations made by a Region I inspector during his inspection on May 23, 1985, and the conclusions and decisions reached by Region I staff subsequent to the enforcement conference held at King of Prussia on June 14, 1985. The inspection and enforcement conference concerned activities at Princeton University authorized by the NRC license indicated above. We also acknowledge receipt of the enclosure to your letter, Notice of Violation and Proposed Imposition of Civil Penalties (EA 85-70). Our position regarding the alleged violations described in the Notice of Violation and the corrective actions taken and planned to prevent a recurrence are described below:

Regarding Violation A - 10 CFR 20.101 Radiation Dose Standards for Individuals in Restricted Areas.

(1) We concede that contrary to the requirements established in subparagraph (a) of the above referenced regulation, phosphorus-32, a licensed material, was used on May 7, 1985, in such a way as to cause an individual to receive a dose to a 1 cm^2 area of "skin of the whole body" of approximately 38 Rem, a dose in excess of the established limit (7.5 Rem/calendar quarter) for the second calendar quarter of 1985.

(2) This violation occurred when an individual opened a vial of reagent which should not have been, was not expected to be, but was pressurized. Upon opening the vial a tiny, sub-sensory amount of the contents sprayed out of the

container. The individual involved failed to adhere to two precautionary procedures established in the University's Radiation Safety Guide, compliance with which is obligatory under license condition 19. The failure of the individual to adhere to these two procedures constitutes the substance of Violation B as described in the Notice of Violation.

We understand from your instructions that we are to address questions (3), (4), and (5) which describe corrective actions and the date of full compliance and that each of these are to be addressed for each violation. Inasmuch as the failures described in Violation B contributed materially to Violation A, in the interest of structural clarity and to avoid repetition, our response to questions (3), (4), and (5) is summarized following our initial response to Violations B.1 and B.2.

Regarding Violation B - Condition 19, License No. 29-05185-24 - Princeton University Radiation Safety Guide.

(1) Violation B.1 - We concede that on May 7, 1985, and contrary to paragraph 10.E of the University's Radiation Safety Guide, an individual did not perform a survey of his person and his clothing for contamination following physical or chemical manipulation, specifically the opening of a vial containing phosphorus-32.

Violation B.2 - We concede that on May 7, 1985, and contrary to paragraph 10.G of the University's Radiation Safety Guide, an individual did not wear laboratory clothing while handling 1.8 mCi of phosphorus-32 in open form, an amount which exceeds the 200 uCi of phosphorus-32 in open form for which laboratory clothing is required.

(2) Violation B.1 and B.2 - The individual involved in this incident holds two advanced degrees and has over 15 years experience working with radioactive materials. Under existing University policy, established in paragraph 6.I of the University's Radiation Safety Guide, such individuals are exempt from attendance to the University's Radiation Safety Seminar. We have no reason to believe the individual acted in flagrant disregard of good procedure and University and NRC requirements. While the University was in compliance with the current training requirement established in the University's Radiation Safety Guide, we recognize that this requirement may not now be sufficient to insure the degree

of compliance both we and the NRC expect. Our corrective action regarding this is described below.

(3), (4) and (5) for Violations A, B.1 and B.2 -

Regarding Violation A

Numerous shipments of this and similar vials are made throughout the country each day, and we did not know how the vial became pressurized or how highly pressurized it might have been. We were, therefore, concerned that such vials might constitute a public health threat to members of the general public during transportation and that future shipments could result in similar incidents here and at other research organizations. Accordingly, on the evening of the incident, May 7, 1985, the manufacturer of the labelled material was notified that a shipment of pressurized vials had been received. The matter was further discussed with the manufacturer's health physicist the following day. In addition, all of the University's laboratories which had recently ordered isotopes supplied in vials from this manufacturer and other manufacturers were telephoned and informed of the potential problem. Proper handling procedures for coping with a potentially pressurized vial were also communicated during these calls. Later, when the initial phases of our investigation were completed and we had an opportunity to review the entire situation we decided to and did inform the Region I office of the Nuclear Regulatory Commission of the potential problem with the pressurized vials.

Regarding Violation A, B.1 and B.2

On May 10, 1985, an immediate action memo was hand carried to all 29 laboratories using radioactive materials supplied in vials regardless of manufacturer. A copy of this memo was given to your inspector on May 23, 1985. The problem with the vials was described and recommendations to prevent a recurrence were provided. The requirement to wear protective clothing, including a laboratory coat, and the requirement to conduct operational surveys during the conduct of an experiment were specifically described.

The day following the incident, the chairman of the department in which the incident occurred (Biology) discussed the incident with the laboratory staff where it occurred to determine the facts. He then visited each of the laboratories in the department actively using phosphorus-32 to inform them of the incident and of the precautions needed to prevent a recurrence of this type of incident with phosphorus-32 or other radioisotopes.

On May 24, 1985, the day following the inspection by Dr. Friedman of the Region I office, the University Health Physicist prepared a report which described the incident, and specifically pointed out the violations which contributed to it. The report also described the possible enforcement actions which might occur and, in considerable detail, the precautions necessary to prevent a recurrence. This report was distributed to all Authorized Users in the Molecular Biology Department on June 3, 1985, and subsequently to all Authorized Users in the Biology Department. Additionally, the incident and the necessary precautions to prevent a recurrence were discussed with several faculty members who sought additional information from the health physics staff.

In sum, this incident received immediate and considerable attention throughout the life science departments where phosphorus-32 in open form is used. The incident and the obvious implications for individual safety resulting from the failure to comply with the two subject requirements were widely known and broadly discussed within days. Thus, the incident itself, particularly when reinforced by the threat of enforcement action and penalties, has served to remind and sensitize all radiation workers using phosphorus-32 in open form, as well as other materials, of the necessity to comply with the NRC and University requirements.

In conclusion, with respect to Violations A, B.1 and B.2 resulting from the use of phosphorus-32 in open form, it is our position that to the extent that any organization can guarantee the individual actions of its employees the University was and has been in full compliance with the cited regulations no later than May 23, 1985, the day of the investigation conducted by Dr. Laurence Friedman of the Region I office.

This incident has, however, identified an area where our current training procedures, previously accepted by the NRC, proved insufficient. Specific steps have been taken to improve the long-range effectiveness of our training program. These include: 1) meetings for all users of phosphorus-32 at which the regulations described in Section 10 of the University's Radiation Safety Guide were discussed, in relation to the incident, and their mandatory nature stressed; and 2) demonstrations, for all users, of the correct procedures to be followed when opening vials containing phosphorus-32, with emphasis on conducting surveys.

There are other initiatives which we have been and will be working on toward the end of strengthening the Radiation Safety Program. These include an expansion of the Radiation Safety Training Program, and reconsideration of the current policy set forth in paragraph 6.I of the University's Radiation Safety Guide which provides an exemption from training for post-doctoral research staff. Two departments, the department involved in this incident and Molecular Biology, have indicated that as a matter of departmental policy participation in the Radiation Safety Seminar Program will be required of all staff, including post-doctoral research staff.

Further, in the interest of preventing any recurrences of such incidents, the Health Physicist has been reminded to make vigorous use of the enforcement provisions set forth in paragraph 3.B of the University's Radiation Safety Guide when and where appropriate. Additionally, the health physics staff has been reminded to bring all infractions of NRC regulations that they observe in the course of their laboratory visits promptly to the attention of the Health Physicist who will report them to the Principal Investigator for action. The first of these two initiatives will require policy changes and modifications to the Radiation Safety Guide and thus requires approval of the Radiation Safety Committee and the Committee on Occupational Safety and Health. We expect final action on these recommendations early this fall.

I also wish to inform you that this response has been prepared without benefit of the enforcement conference report which we did not receive until Friday, July 19, 1985. Further, your July 3, 1985, letter transmitting the Notice of Violation states "... that timely, comprehensive, long-term corrective action to prevent recurrence had neither been planned nor initiated at the

time of the enforcement conference." We believe this response makes clear that a number of corrective actions had, in fact, been initiated prior to the June 14 conference. Additionally, in that transmittal letter it is implied that I personally attended the enforcement conference; however, I was unable to attend.

I trust that this response satisfies the requirements in the regulations and the concerns noted in your letter of July 3, and in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties. We regret this unfortunate incident and want to assure you that we will continue to do everything we can do to maintain high standards in this important aspect of our activities.

Sincerely yours,

A. J. Maruca
Vice President for
Administrative Affairs

The information provided herein is true and correct to the best of my knowledge.

ATTEST

Howard S. Ende
Assistant Secretary

A. J. Maruca
Vice President for
Administrative Affairs

AJM/JCF:kv

cc: Regional Administrator
United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Radiation Safety Committee
Committee on Occupational Safety & Health
Professor E. C. Cox
Professor P. Schedl

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

OCT 10 1985

Docket No. 030-00882
License No. 29-05185-24
EA No. 85-70

Princeton University
ATTN: Mr. Anthony Maruca
Vice President for
Administrative Services
1 Nassau Hall
Princeton, New Jersey 08554

Gentlemen:

Subject: Order Imposing Civil Monetary Penalties

This refers to your two letters dated July 29, 1985 in response to the Notice of Violation and Proposed Imposition of Civil Penalties sent to you with our letter dated July 3, 1985. Our letter and Notice described violations identified during NRC Inspection No. 85-01 conducted in May 1985 in response to an incident involving a skin exposure in excess of the regulatory limit.

In your response, you admit the cited violations but request that the proposed civil penalties of $4,000 be withdrawn. After careful consideration of your response, we have concluded, for the reasons described more fully in the enclosed Order and Appendix, that the civil penalties should be mitigated by fifty percent (50%) because of your prompt identification and reporting of the incident, and your prior good enforcement history. However, full mitigation has been deemed inappropriate because the corrective actions were neither prompt nor comprehensive. Accordingly, we hereby serve the enclosed Order on Princeton University imposing civil penalties in the cumulative amount of Two Thousand Dollars ($2,000).

In your response to the Notice of Violation, you have described corrective actions addressing only problems directly identified in your investigation of this one incident. To this date, you have not described to this office or to the Region I office a comprehensive program of corrective actions to assure that standards of training for individuals authorized to use NRC licensed materials have been established throughout your institution. Therefore, please describe those actions taken or planned to assure that such standards are established and describe the system of surveillances and audits you have instituted or will institute to assure these standards are implemented. This response should be directed to the Region I office, with a copy 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.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosures:
1. Order Imposing Civil Monetary Penalties
2. Appendix - Evaluation and Conclusion

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

PRINCETON UNIVERSITY Princeton, New Jersey 08544	)))	Docket No. 30-00882 License No. 29-05185-24 EA 85-70

ORDER IMPOSING CIVIL MONETARY PENALTIES

I

Princeton University, Princeton, New Jersey, (the "licensee") is the holder of License No. 29-05185-24 (the "license") issued by the Nuclear Regulatory Commission (the "Commission" or "NRC") which authorizes the licensee to use by-product material for research and development.

II

An NRC safety inspection of the licensee's activities under the license was conducted on May 23, 1985 to review the circumstances associated with a skin exposure to an individual in excess of regulatory limits. The exposure was reported to the NRC by the licensee. During the inspection, the NRC staff verified that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalties was served upon the licensee by letter dated July 3, 1985. The Notice states the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the proposed

civil penalties for the violations. Two letters, dated July 29, 1985, in response to the Notice of Violation and Proposed Imposition of Civil Penalties, were received from the licensee.

III

Upon consideration of the answers received, and the statements of fact, explanations, and arguments for remission or mitigation of the proposed civil penalties contained therein, the Director, Office of Inspection and Enforcement, has determined, as set forth in the Appendix to this Order, that the penalties proposed for the violations designated in the Notice of Violation and Proposed Imposition of Civil Penalties should be mitigated by fifty percent (50%).

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 ($2,000) within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United Stated and mailed to the Director, 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. 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 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

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 30th day of October 1985

APPENDIX

EVALUATION AND CONCLUSION

In the licensee's two July 29, 1985 responses to the Notice of Violation and Proposed Imposition of Civil Penalties dated July 3, 1985, the licensee admits the three violations, but protests the proposed imposition of civil penalties. Provided below are (1) a restatement of each violation, (2) a summary of the licensee's arguments in support of mitigation of the proposed penalties, and (3) the NRC staff's evaluation of the licensee's response and conclusion.

Restatement of Violations

A. 10 CFR 20.101(a) requires that no licensee possess, use, or transfer licensed material in such a way as to cause an individual to receive a dose to the skin of the whole body in excess of 7.5 rems per calendar quarter.

Contrary to the above, on May 7, 1985, phosphorus-32, a licensed material, was used in such a way as to cause an individual to receive a dose to the skin of the whole body of approximately 38 rems, a dose in excess of five times the stated limit for the second calendar quarter of 1985.

B. Condition 19 of License No. 29-05185-24 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in the Princeton University Radiation Safety Guide, dated December 1979.

1. Paragraph 10.E of this guide, "Personal Surveys," requires thorough checks of one's person and clothing for contamination following the physical or chemical manipulation of radioisotopes.

   Contrary to the above, on May 7, 1985, an individual did not perform a check (survey) of his person and clothing for contamination following the manipulation of radioisotopes involving the opening of a vial containing 1.8 millicuries of phosphorus-32.

2. Paragraph 10.G of this guide, "Protective Clothing," requires that laboratory clothing be worn when handling more than 200 microcuries of phosphorus-32 in open form.

   Contrary to the above, on May 7, 1985, an individual did not wear laboratory clothing while handling 1.8 millicuries of phosphorus-32 in open form.

Collectively, these violations have been categorized as a Severity Level II problem (Supplements IV and VI).

Summary of Licensee Response:

The licensee admits the occurrence of all the violations cited in the Notice of Violation and Proposed Imposition of Civil Penalties but requests mitigation of the civil penalties for the following stated reasons:

(1) the incident was promptly identified and reported to the NRC;

(2) prompt and effective corrective actions were taken to prevent recurrence of the incident; and

(3) the enforcement history is good.

The licensee disagrees with the NRC position expressed in the July 3, 1985 letter that "timely, comprehensive, long-term corrective action to prevent recurrence had neither been planned nor initiated at the time of the enforcement conference." The licensee states that, at the time of the enforcement conference, changes in the training program, requirements for attendance, as well as an active review of enforcement procedures, were all under consideration.

NRC Evaluation of Licensee Response

The licensee has provided a sufficient basis for mitigation of a portion of the civil penalties because the licensee promptly identified, evaluated and reported the incident to the NRC, and the licensee has a good enforcement history. However, full mitigation has been deemed inappropriate because the long term corrective actions discussed at the enforcement conference were only under consideration, not planned or initiated (as admitted in one of the licensee's July 29, 1985 responses), and these long-term corrective actions are not considered comprehensive, as described herein.

The exposure in excess of the regulatory limit was received by a foreign investigator who neither wore a laboratory coat while using P-32, nor performed a survey after its use. Apparently, the licensee assumed that the foreign investigator understood proper laboratory techniques, based on his experience and education. As a result, the individual was exempt from attending training in procedures either required by the licensee or accepted as minimally sufficient by other investigators. If the individual had been trained and followed the procedures, the exposure could have been avoided.

Notwithstanding the impact that the lack of training had on the occurrence of this exposure, the licensee had not, at the time of the enforcement conference or at the time of its July 29, 1985 letters, initiated corrective actions to establish minimum criteria as to the content of training for all employees authorized to handle licensed material, nor had the licensee established uniform

guidelines for principal investigators to use when evaluating the previous training of individuals wishing to use such material. Further, any corrective actions that had been initiated have been narrowly focused on users of phosphorus-32, rather than generally focused on users of all materials which present a potential source of personnel contamination and exposure.

Conclusion

In conclusion, the NRC considers 50% mitigation of the proposed civil penalties ($4,000) appropriate because of the licensee's identification and reporting of the incident, and its enforcement history. However, full mitigation has been deemed inappropriate because the corrective actions were neither prompt nor comprehensive. Absent the licensee's self-identification, reporting and prior enforcement history, a basis would have existed for escalation of the civil penalty amount. Therefore, civil penalties in the amount of $2,000 should be imposed.

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

NOV 7 1985

Docket No. 030-14052
License No. 12-18693-01
EA 85-116

Quality Assurance Testing
ATTN: Mr. Jay Laudicina
President
P. O. Box 415
LaFox, Illinois 60147

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES
(NRC INSPECTION REPORT NO. 030-14052/85001[DRSS])

This refers to the special inspection conducted by Mr. James L. Lynch of this office on August 2 and August 21, 1985 of activities authorized by NRC Byproduct Material License No. 12-18693-01. The results of the inspection were discussed on September 9, 1985 during an enforcement conference between you and Mr. A. Bert Davis and others of the NRC staff. As a result of the inspection, it appears that several violations of NRC requirements have occurred which demonstrate that Quality Assurance Testing has not maintained adequate control over its licensed activities.

Four violations were identified during the inspection. The violations which are described in the enclosed Notice demonstrate a breakdown in your management oversight and control of licensed activities. The violations are of particular concern to the NRC because you did not appear to know or understand the conditions of your license as demonstrated at the September 9, 1985 Enforcement Conference.

To emphasize the importance of complying with NRC regulations and to ensure effective management control of your 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 Penalties in the amount of Five Hundred Dollars ($500) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the violations described in the enclosed Notice have been categorized in the aggregate as a Severity Level III problem. The base civil penalty for a Severity Level III problem is $500. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustment has been deemed appropriate.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. In particular, you should describe what management actions will be implemented to ensure that the conditions of your license as well as NRC regulations are followed in the future. After reviewing your response to this Notice, including your proposed corrective actions, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures 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,

A Bert Davis

for James G. Keppler
Regional Administrator

Enclosures:
1. Notice of Violation
   and Proposed Imposition
   of Civil Penalties
2. Inspection Report
   No. 030-14052/85001(DRSS)

See Attached Distribution

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Quality Assurance Testing
P. O. Box 415
LaFox, Illinois 60147

Docket No. 030-14052
License No. 12-18693-01
EA 85-116

During an NRC special inspection conducted on August 2 and August 21, 1985 violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

1. License Condition No. 12 states that licensed material shall be used by, or under the supervision and in the physical presence of, individuals who have satisfactorily completed the device manufacturer's training program for gauge users.

   Contrary to the above, from 1979 to June 1985, licensed material contained in gauges was used by individuals who had not completed the device manufacturer's training program and were not in the presence of individuals who had completed the training program.

2. License Condition No. 17 requires that licensed material be possessed and used in accordance with the statements, representations, and procedures contained in, among other documents, the licensee's April 18, 1979 application.

   The licensee's April 18, 1979 application states that all individuals using licensed materials will wear film badges to be exchanged on a monthly basis.

   Contrary to the above, an employee operated a moisture density gauge containing licensed material on approximately six occasions in June 1985 without utilizing a film badge or other dosimetry device.

3. 10 CFR 20.401 requires that records of radiation exposures to individuals for whom personnel monitoring is required under 10 CFR 20.202 be maintained for review by the Nuclear Regulatory Commission.

   Contrary to the above, at the time of the NRC inspection on August 2, 1985, the licensee did not have radiation exposure records available for review for individuals using licensed material for whom personnel monitoring is required pursuant to 10 CFR 20.202.

4. License Condition No. 13 requires that sealed sources containing byproduct material be tested for leakage and/or contamination at intervals not to exceed six months.

Contrary to the above, leak tests have not been performed semiannually on two moisture density gauges, each containing 10 millicuries of cesium-137 and 50 millicuries of americium-241. Specifically, a Troxler 3411B gauge received in June 1983 was only tested in June 1983 and June 1984, and a Troxler 3401B gauge received in July 1983 was tested only in July 1983.

Collectively, the above violations have been evaluated as a Severity Level III problem (Supplements IV and VI).

(Cumulative Civil Penalties - $500.00 assessed equally among the violations).

Pursuant to the provisions of 10 CFR 2.201, Quality Assurance Testing 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 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. If an adequate reply is not received within the time specified in this Notice, the Director, Office of Inspection and Enforcement, may issue an order to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Quality Assurance Testing may pay the civil penalties by letter addressed to the Director, Office of Inspection and Enforcement, with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of Five Hundred Dollars ($500) or may protest imposition of the civil penalties, in whole or in part, by a written answer addressed to the Director, Office of Inspection and Enforcement. Should Quality Assurance Testing 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 Quality Assurance Testing 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 proposed penalties.

In requesting mitigation of the proposed penalties, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1985) should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201 but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing

page and paragraph numbers) to avoid repetition. Quality Assurance Testing's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing civil penalties.

Upon failure to pay any civil 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

A Bert Davis

for James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 7th day of November 1985

Quality Assurance Testing

P.O. BOX 1128, ST. CHARLES, ILLINOIS 60174 • (312) 232-6171

December 4, 1985

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

RE: Docket #030-14052
License #12-18693-01
EA 85-116
NRC Inspection Report #030-14052/85001 (DRSS)

Gentlemen:

Regarding your letter of November 7, 1985, the following actions have been taken by this company:

1. All personnel satisfactorily completed the device manufacturer's training program for gauge users.

2. All individuals using licensed materials will wear film badges to be exchanged on a monthly basis.

3. Records of radiation exposures to individuals for whom personnel monoriting will be maintained for review by the Nuclear Regulatory Commission.

4. Sealed sources containing by product material will be tested for leakage and/or contamination at intervals not to exceed six months.

5. This company will abide by all the regulations as set forth by the Nuclear Regulatory Commission for this type of license.

Enclosed is the civil penalty requested by your office.

Respectfully submitted,

QUALITY ASSURANCE TESTING

Jay Laudicina

Jay Laudicina
President

JL:sd

cc: Regional Administrator
Glen Ellyn, Il.

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

MAR 0[illegible] 1985

Docket No. 30-17020
License No. 31-00636-07
EA 84-98

Veterans Administration Medical Center
ATTN: Mr. K.L. Mulholland, Jr.
Director
130 West Kingsbridge Road
Bronx, New York 10468

Gentlemen:

SUBJECT: ORDER MODIFYING LICENSE AND NOTICE OF VIOLATION
(NRC INSPECTION 84-01)

This refers to the NRC safety inspection conducted on August 9-10, 1984 of activities authorized by NRC License No. 31-00636-07. The report of the inspection was forwarded to you on August 29, 1984. The inspection was conducted to review the circumstances associated with a radiation exposure to a licensee researcher to iodine-125 in excess of the NRC regulatory limit. The exposure was reported to NRC Region I by your Radiation Safety Officer on August 8, 1984. During the inspection, another violation of NRC requirements was identified. On September 5, 1984, we held an enforcement conference with you and members of your staff during which these violations, their causes, and your corrective actions were discussed.

The violations are described in the enclosed Notice of Violation. The first violation described in the Notice is of significant concern to the NRC because it involves an exposure to radioactive material equivalent to an exposure 554 times the regulatory limit. Although the cause of the exposure was not identified, the second violation, involving the failure of an individual to wear a glove while handling iodine-125, may have contributed to the exposure. These violations demonstrate the importance of a strong and effective radiation safety program, adherence to NRC requirements, and safe performance of licensed activities. You are reminded that it is the responsibility of the licensee to assure that all radiation workers are knowledgeable of NRC requirements and safe practices for handling of licensed material, to actively monitor all uses of radioactive material to provide early detection of problems, and to promptly and effectively implement corrective actions to prevent recurrence of violations.

To emphasize the importance of adherence to NRC requirements and safe performance of licensed activities, I have decided to issue the enclosed Order Modifying License requiring periodic unannounced audits of the radiation safety program by an independent third party. The Order requires a third party to observe the action of your employees involved with the use of licensed material to verify adherence to NRC requirements.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

MAR 05 1985

Veterans Administration
Medical Center 2

The violations associated with this occurrence have been classified in the aggregate at Severity Level I in accordance with the General Statement of Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984). Although civil penalties are normally proposed for Severity Level I violations, I have determined that issuance of the enclosed Order is the more appropriate action in this case.

You are required to respond to the enclosed Order and Notice and, in preparing your response, you should follow the instructions specified in the Notice. Your reply to this letter, Order, and Notice, 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 Order and Notice, are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosures:
1. Order Modifying License
2. Notice of Violation

cc:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New York

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

VETERANS ADMINISTRATION MEDICAL CENTER Bronx, New York 10468	)	Docket No. 30-17020 License No. 31-00636-07 EA 84-98

ORDER MODIFYING LICENSE

I

Veterans Administration Medical Center, Bronx, New York, (the "licensee"), is the holder of specific byproduct Material License No. 31-00636-07 issued by the Nuclear Regulatory Commission (the "NRC") pursuant to 10 CFR Part 30.

II

On August 9-10, 1984, an NRC safety inspection of the licensee's program was conducted to review the circumstances associated with a radiation exposure of a licensee employee to iodine-125 in excess of the regulatory limit. The exposure was reported to NRC Region I by the licensee's Radiation Safety Officer on August 8, 1984.

The exposure involved a researcher at the Medical Center having a thyroid burden of 524 microcuries of iodine-125, which was identified by the Medical Center during a routine thyroid bioassay on August 3, 1984. The exposure that the

individual received was the equivalent of 554 times the maximum permissible airborne concentration for a calendar quarter, resulting in an exposure to the individual's thyroid of approximately 2000 rads. The most likely cause of the uptake is through oral ingestion of the material.

Neither the licensee nor the NRC inspectors were able to conclusively determine how the researcher received the thyroid uptake. The researcher indicated that he had not been administered any iodine-125 for purposes of medical diagnosis or therapy. Although the individual routinely worked with millicurie quantities of iodine-125, the individual denied having mouth pipetted or using poor handling techniques, other than failing to wear a glove on his right hand while handling a stock vial containing seven millicuries of iodine-125 on July 28, 1984.

The seven millicuries of iodine-125, contained in 0.1 milliliters of solution, are no longer in the vial and cannot be accounted for by other uses. Although contamination as high as 3,000,000 disintegrations per minute per 100 square centimeters were found in a few areas of the individual's residence, the amount of iodine-125 in the individual's thyroid (524 microcuries) and the limited and relatively low amounts of surface contamination found in most areas of the laboratory and in his personal residence indicate that skin absorption is not likely to be the route of uptake. Much higher levels of external radioactive contamination on his person and on objects handled by him would be expected if this were the mode of entry. However, the only other credible mode of entry is by swallowing and, as noted above, the individual denied mouth pipetting.

Although no specific programmatic weaknesses in the licensee's program were identified during the inspection, the magnitude and seriousness of this exposure warrant additional actions to verify adherence by users of license material to NRC procedural requirements.

III

In view of the foregoing, and pursuant to Sections 81, 161(b), 161(o), and 182 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Part 2 and 10 CFR Part 30, IT IS HEREBY ORDERED THAT:

(A) Within 30 days of the effective date of this Order, the licensee shall (1) retain the services of an independent third party organization to perform unannounced audits of the licensed activities during each of the four calendar quarters in 1985, to verify that users of licensed material are adhering to NRC and procedural requirements of the licensee's radiation protection program, and (2) submit to the Regional Administrator, NRC Region I, a description of the organization retained, including the name(s) and resume(s) of the individual(s) who will perform the audits. This submittal shall also include statements from the individual(s) indicating that they presently are not and previously have not been employed by the licensee.

(B) Within 30 days of the date of completion of each of the four audits, the independent third party shall provide a report of the audit findings and

recommendations for corrective action, as appropriate, to the licensee's Hospital Administrator. A copy of each report, and any drafts provided to the licensee, shall be sent to the Regional Administrator, NRC Region I at the same time they are provided to the licensee.

(C) Within 30 days of the date of issuance of each report of the four audits by the independent organization, the licensee shall submit it's own report to the NRC Regional Administrator describing the actions taken to correct identified deficiencies and implement each recommendation made by the independent organization during each of the four audits, or provide justification if any specific recommendation is not adopted.

The Regional Administrator, NRC Region I, may relax or terminate any of the preceding conditions for good cause.

IV

The licensee or any other person whose interest is adversely affected by this Order may request a hearing on this Order. Any request for hearing shall be submitted to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, within 30 days of the date of this Order. A copy of the request shall also be sent to the Executive Legal Director at the same address and to the Regional Administrator, NRC Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406.

If a hearing is to be held concerning this Order, the Commission will issue an Order designating the time and place of hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order shall be sustained.

This Order shall become effective upon consent or, upon expiration of the time during which the licensee may demand a hearing or, in the event that the licensee demands a hearing, on the date specified in an order issued following further proceedings on this Order.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 5th day of March 1985

NOTICE OF VIOLATION

Veterans Administration Medical Center
Bronx, New York 10468

Docket No. 30-17020
License No. 31-00636-07
EA 84-98

An NRC inspection of activities authorized under NRC License No. 31-00636-07 was conducted on August 9-10, 1984, to review the circumstances associated with a violation of NRC requirements involving an exposure of a licensee employee to iodine-125. The NRC has concluded that although the exact route of uptake of iodine-125 was not determined, the resultant uptake of iodine-125 was equivalent to that which would have resulted from an occupational exposure to an airborne concentration of 554 times the regulatory limit. During the inspection, one other violation of NRC requirements was identified.

The two violations have been categorized in the aggregate at Severity Level I. In accordance with the General Statement of Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, the violations are listed below:

A. 10 CFR 20.103(a)(1) states that no licensee shall possess, use, or transfer licensed material in such a manner as to permit an individual in a restricted area to be exposed to radioactive material such that the uptake by any organ from either inhalation or absorption or both routes of intake in any calendar quarter exceeds that which would result from inhaling such radioactive material for 40 hours per week for 13 weeks, that is, 520 hours, at the maximum permissible concentrations (MPC) specified in 10 CFR Part 20, Appendix B, Table I, Column 1.

   Contrary to the above, on or before August 3, 1984, a researcher at the licensee's facility received a thyroid burden equivalent to an exposure of 288,000 MPC hours to airborne iodine-125 during the third calendar quarter of 1984, an amount 554 times the limit specified in 10 CFR Part 20, Appendix B, Table I, Column 1.

B. Condition 23 of License No. 31-00636-07 requires that licensed material be possessed and used in accordance with statements, representations and procedures contained in an application received July 3, 1978.

   Item 15 of the application requires that individuals working with licensed material wear disposable gloves.

   Contrary to the above, on July 28, 1984, one individual working in the research laboratory did not wear a disposable glove on his right hand while working with seven millicuries of iodine-125.

Collectively, these violations have been categorized in the aggregate at Severity Level I (Supplements IV and VI).

Pursuant to the provisions of 10 CFR 2.201, the Veterans Administration Medical Center 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, Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406, 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.

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

NOV [illegible] 1985

Mr. Vernon E. Clayton
Acting Regional Director
Dept. of Medicine & Surgery
Northeastern Region
Veterans Administration
Washington, D.C. 20420

Dear Mr. Clayton:

On November 8, 1985, you sent a letter to the Deputy Regional Administrator, Region I, in which you submitted a proposal for conducting audits of licensed activities at the Veterans Administration Medical Center in Bronx, New York as required by the March 5, 1985 NRC Order. In your submittal, you (1) propose to conduct two inspections/audits six months apart, unless an earlier follow-up is dictated by the results of the first audit, and (2) you designate Dr. Walter Shreeve and Mr. Terry Johnson of VAMC, Northport, New York, as the individuals to conduct the audits.

We consider this proposal acceptable. Thus, in accordance with Section III of the Order, I am relaxing provision III.A to permit you to conduct two audits of the VA Bronx Medical Center, no more than six months apart, with the first audit scheduled to be conducted during the week of December 2, 1985. You are reminded that the provisions of Sections III.B and III.C of the Order concerning evaluation and submittal of reports to the NRC remain in effect.

Since we have taken action to relax the March 5th Order in accordance with your request, you need not withdraw your request for a hearing. We consider it withdrawn.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

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

MAR 27 1985

Docket Nos. 30-0123
30-01314
70-2199
License Nos. 08-00942-04
08-00942-05
SNM-1605
EA No. 85-31

Veterans Administration Medical Center
ATTN: A. A. Gavazzi
Medical Center Director
50 Irving Street, NW
Washington, DC 20422

Gentlemen:

SUBJECT: ORDER MODIFYING LICENSE AND NOTICE OF VIOLATION (NRC INSPECTION 85-01)

This refers to the NRC safety inspection conducted on January 22, 1985 of activities authorized by NRC License Nos. 08-00942-04, 08-00942-05, and SNM-1605. The report of the inspection was forwarded to you on February 15, 1985. During the inspection, six violations of NRC requirements were identified. On February 28, 1985, we held an enforcement conference with Dr. R. Lindeman and Mr. J. Bowman of your staff, and Dr. J. J. Smith, of the Veterans Administration Central Office in Washington, DC, during which these violations, their causes, and your corrective actions were discussed.

The violations, which are described in the enclosed Notice, collectively represent a significant programmatic breakdown in management oversight and control of the radiation safety program. Individually the violations demonstrate the need for improvement in the administration and control of the radiation safety program to assure adherence to NRC requirements and safe performance of licensed activities. The violations are of particular concern to the NRC because deficiencies in implementation of the radiation safety program had been previously identified by your Radiation Safety Committee and corrective actions were not taken to correct the violations. The violations warrant: (1) a thorough, independent assessment of the radiation safety program and the Medical Center's management control of the program to determine the existence and extent of similar deficiencies; and (2) a plan for upgrading the program, including the Medical Center's management oversight and control of the program. Accordingly, I have decided to issue the enclosed Order Modifying License to require such an assessment and plan.

The violations have been classified in the aggregate as Severity Level III problem in accordance with the General Statement of Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

MAR 27 1985

(March 8, 1984). Although civil penalties are considered for Severity Level III problems, I have determined that the more appropriate enforcement action in this case is the issuance of the enclosed Order.

You are required to respond to the enclosed Order and Notice and, in preparing your response, you should follow the instructions specified in the Order and Notice. Your reply to this letter and the enclosures 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 and Order are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James M. Taylor, Director
Office of Inspection and Enforcement

Enclosures:
1. Order Modifying License
2. Notice of Violation

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
District of Columbia (2)

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

VETERANS ADMINISTRATION MEDICAL CENTER Washington, DC 20422	)	Docket Nos. 30-0123 30-01314 70-2199 License Nos. 08-00942-04 08-00942-05 SNM-1605 EA No. 85-31

ORDER MODIFYING LICENSE

I

The Veterans Administration Medical Center, Washington, DC, (the "licensee"), is the holder of specific byproduct Material License Nos. 08-00942-04 and 08-00942-05, and Special Nuclear Material License No. SNM-1605 issued by the Nuclear Regulatory Commission (the "NRC") pursuant to 10 CFR Parts 30, 33, 35 and 70, which authorize the licensee to possess and use radioactive materials for medical diagnosis, therapy and research.

II

On January 22, 1985, an NRC safety inspection of the licensee's program was conducted. During the inspection, six violations of NRC requirements were identified. The violations involved: improper disposal of materials to a landfill; inadequate security of licensed material; failure to perform a survey; failure to implement certain training requirements; inadequate control of materials upon receipt; and failure to maintain the minimum number of survey instruments. The violations are described in greater detail in the Notice of Violation being issued concurrently with this Order, and the Notice of Violation is incorporated herein by reference as a basis for this Order.

The number of these violations and the fact that several of them had been identified previously by the licensee's Radiation Safety Committee, but had remained uncorrected, demonstrate inadequate management control of the radiation safety program. In view of the licensee's lack of follow-up to correct previously identified deficiencies, significant corrective measures to prevent similar violations in the future are necessary. Accordingly, I have determined that an assessment of the licensee's radiation safety program should be performed, including the licensee's management of the program, and a plan should be developed and implemented to upgrade the program to correct deficiencies identified during the assessment.

III

In view of the foregoing, and pursuant to Sections 53, 81, 161(b), 161(o), and 182 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.204 and 10 CFR Parts 30, 33, 35 and 70, IT IS HEREBY ORDERED THAT:

A. Within 30 days from the effective date of this Order the licensee shall retain the services of an expert, independent of the licensee's staff, with extensive experience in the management and implementation of a broad scope licensed medical radiation safety program to perform an assessment of the licensee's radiation safety program. Within the same 30 days the licensee shall submit the name and qualifications of the expert to the Regional Administrator, Region I.

B. Within 60 days of the effective date of this Order, the assessment shall be performed. The assessment of the licensee's radiation safety program shall include, but need not be limited to, a review of:

1. the licensee's organization, and assigned responsibilities and authorities within that organization;

2. the licensee's program for training and retraining individuals working with NRC-licensed materials in NRC regulations, in the conditions of the licenses, and in safe practices for using licensed material;

3. the licensee's methods of approving individuals for the use of licensed materials and developing procedures for the safe use of licensed materials;

4. the licensee's program for training and qualifying all individuals involved in managing, supervising, inspecting and auditing licensed activities;

5. the licensee's program of surveillances and audits to determine compliance by individual users of licensed materials with NRC regulations, the conditions of the NRC licenses, and the licensee's own procedures for the safe use of radioactive materials; and,

6. the licensee's management of the radiation safety program, including the function of the Radiation Safety Committee and its methods of monitoring the program to ensure that problems are identified and that identified problems are promptly corrected.

C. Within 90 days of the effective date of this Order, the expert performing the evaluation shall provide the Hospital Director a written report which describes any weaknesses identified during the assessment and recommendations for improvement. A copy of this report shall be provided to the Regional Administrator, NRC Region I, at the same time it is transmitted to the licensee.

D. Within 120 days of the effective date of this Order, the licensee shall submit a report to the Regional Administrator, NRC Region I, describing the methods of implementing the recommendations of the assessment report, or providing justification for alternative or no corrective action if any specific recommendations are not adopted. This report shall include:

1. action items completed or to be performed;

2. schedules for, or dates of, completion of each specific action item; and

3. a system for monitoring and tracking the status and completion of the action items.

Upon completion of all action items, a final report shall be submitted to the Regional Administrator, NRC Region I.

E. The Regional Administrator, NRC Region I, may relax or terminate any of the preceding conditions for good cause shown.

IV

The licensee or any other person whose interest is adversely affected by this Order may request a hearing on this Order. Any request for hearing shall be submitted to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555, within 30 days of the date of this Order. A copy of the request shall also be sent to the Executive Legal Director at the same address and to the Regional Administrator, NRC Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406.

If a hearing is to be held concerning this Order, the Commission will issue an Order designating the time and place of the hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order shall be sustained.

This Order shall become effective upon expiration of the time during which a hearing may be requested or, in the event a hearing is requested, on the date specified in an Order issued following further proceedings on this Order.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 27th day of March 1985

NOTICE OF VIOLATION

Veterans Administration Medical Center
Washington, DC 20422

Docket Nos. 30-0123
30-01314
70-2199
License No. 08-00942-04
08-00942-05
SNM-1605
EA No. 85-31

An NRC inspection of activities authorized under NRC License Nos. 08-00942-04, 08-00942-05, and SNM-1605 was conducted on January 22, 1985. During the inspection, six violations of NRC requirements were identified. Collectively, these violations represent inadequate management control and oversight of the radiation safety program.

In accordance with 10 CFR 2.201 and the General Statement of Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, 49 FR 8583 (March 8, 1984), these particular violations are set forth below:

A. 10 CFR 20.301 requires that no licensee dispose of licensed material except by certain methods specified in 10 CFR 20.301 or as otherwise authorized.

Contrary to the above, on March 11, 1983, millicurie quantities of iodine-125, carbon-14 and tritium were sent to a landfill for disposal and the landfill was not licensed to receive radioactive materials. Such disposal is not a method specified by 10 CFR 20.301 nor was it specifically authorized.

B. 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 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 January 22, 1985, millicurie quantities of licensed material were located in the Nuclear Medicine Laboratory, an unrestricted area that was unlocked when it was not under constant surveillance and immediate control. The laboratory was accessible to visitors and employees who were not authorized to enter the laboratory.

C. 10 CFR 20.201(b), requires that each licensee make such surveys as may be necessary to comply with all sections of Part 20 and are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

Contrary to the above, as of January 22, 1985, adequate surveys were not made to verify that an individual, who handled a significant quantity of iodine-131 during an iodine therapy administration performed in August 1984, was not exposed to airborne concentrations exceeding the limits specified in 10 CFR 20.103. Specifically, the evaluation was inadequate in that the raw thyroid monitoring data were not evaluated.

D. Condition 21 of License No. 08-00942-05 requires that licensed material be possessed and used in accordance with statements, representations and procedures contained in an application dated December 22, 1978 and letters dated November 30, 1979, July 8, 1980, December 5, 1980, January 7, 1983 and January 23, 1984. Included with the January 23, 1984 letter is a copy of the licensee's "Radiation Safety Guide for Radioisotope Use."

1. Item 12 of the December 22, 1978 application requires that annual lectures in radiation safety training be provided to employees who work in housekeeping, supply, security, medical administration, research, radiation therapy, nursing and nuclear medicine.

   Contrary to the above, as of January 22, 1985, lectures in radiation safety training had not been provided to the employees who work in supply, security, medical administration, research, radiation therapy and nuclear medicine.

2. Section I, Paragraph J, of the "Radiation Safety Guide for Radioisotope Use," requires that all shipments of radioactive materials received by the medical center be delivered to Radiation Safety and/or be locked in Room GD-210 for temporary storage. This Section also requires that all radioactive shipments received be inspected and surveyed upon receipt.

   Contrary to the above, on January 22, 1985, a shipment of radioactive materials (radiopharmaceuticals) was received and the material was not delivered to Radiation Safety, was not locked in Room GD-210, and was not inspected or surveyed upon receipt.

3. Item 9.a of the December 22, 1978 application requires that the licensee maintain a minimum of six radiation survey instruments for the radioisotope program, including four geiger-muller type and two ionization chamber units. It further requires that, when these units are replaced, instruments of similar type and function will be purchased.

   Contrary to the above, since May 1984, and as of January 22, 1985, the required minimum number of radiation survey instruments has not been maintained for the radioisotope program.

Collectively, these violations have been categorized as a Severity Level III problem (Supplements IV and VI).

Pursuant to the provisions of 10 CFR 2.201, Veterans Administration Medical Center is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, DC 20555, and a copy to the Regional Administrator, NRC Region I, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 27th day of March 1984

NOV 07 1985

Docket Nos. 30-0123
30-01314
70-2199

License Nos. 08-00942-04
08-00942-05
SNM-1605

Veteran's Administration Medical Center
ATTN: A. A. Gavazzi
Medical Center Director
50 Irving Street, NW
Washington, D.C. 20422

Gentlemen:

Subject: Completion of Requirements of Order Modifying License

On March 27, 1985, an Order Modifying License was issued to the Veterans Administration Medical Center, Washington, D.C., to improve adherence to the requirements of the radiation safety program. To achieve such improvement, Section III of the Order required that you retain a consultant who would initiate an independent assessment of the radiation safety program, that you consider the recommendations of the assessment and that you provide the NRC Regional Administrator two reports. The first required report, which you have already submitted in accordance with Section III.C of the Order, described action items to be completed in response to the assessment recommendations and a schedule for completion of these items. The final report is required to be submitted in accordance with Section III.D of the Order upon completion of all action items.

We have reviewed your letters dated May 20, 1985 and August 2, 1985 in response to the Order. Upon completion of the two outstanding action items referenced in your August 2, 1985 letter, submittal of a final report to this office should complete the terms of the Order. The final report should describe the results of all committed actions.

No reply to this letter is required. Thank you for your cooperation in this matter.

Sincerely,

T Murley

Thomas E. Murley
Regional Administrator

Medical Center

50 Irving Street, NW.
Washington D.C. 20422

Veterans Administration

In Reply Refer To: 688/115

May 20, 1985

Mr. Thomas T. Martin, Director
Division of Engineering and
Technical Programs
US Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

THRU: Dr. James J. Smith, Director (115)
Nuclear Medicine Service, VAMC

Reference: License Nos. 08-00942-05
08-00942-04
SNM-1605

SUBJ: NRC Inspection No. 85-01

The attached report from William Hendee is provided to you in accordance with the NRC license modification order dated March 27, 1985.

E.A. GAVAZZI
Medical Center Director

Enclosure

University of Colorado Health Sciences Center

University Hospitals
School of Medicine
School of Nursing
School of Dentistry

4200 East Ninth Avenue
Denver, Colorado 80262

April 23, 1985

Robert D. Lindeman, M.D.
Chief of Staff
Veterans Administration Medical Center
50 Irving Street, NW
Washington, DC 20422

Dear Dr. Lindeman:

Thank you for the courtesies extended to me by you and your staff during my consultation visit on April 17, 1985 to the Washington D.C. Veterans Administration Medical Center. In particular I appreciate the time provided by Dr. Lunzer, Dr. Veras, Mr. Aron, Ms. Sheppard and yourself in reviewing in detail the various aspects of your radiation safety program. The Radiation Safety Officer, Mr. Bowman, was very cooperative and helpful during my entire visit. I also appreciated the presence of Dr. James Smith, Chief of the Nuclear Medicine Service of the VA Central Office.

With regard to the specific issues noted as violations during the January 22, 1985 inspection of your facilities by a representative of the U.S. Nuclear Regulatory Commission (NRC), I am able to offer the following comments.

(1). Improper disposal of materials to a landfill.
This violation was brought to the attention of the NRC by Mr. Bowman when it occurred, and had been documented well before the inspection. Additional training procedures and retention of radioactive wastes in locked quarters, as presently implemented, should prevent a reoccurrence of this problem.

(2). Inadequate security of licensed material.
At the time of the NRC inspection, there was a security problem related to the administration of radiopharmaceuticals to patients. This problem was the transport of dosages to be administered to patients across a busy employees corridor. Since the inspection, the procedure has been changed so that dosages are administered to patients in the dosage preparation area, so that syringes and vials are not transported across the corridor. Furthermore, the corridor traffic will be diminished substantially by rerouting of employee traffic to the floor above once additional floors of the parking garage are opened sometime this summer. Eventual re-siting

of the Nuclear Medicine Service to new quarters also will reduce this problem. The present practice of administering patient dosages in the dosage preparation area is probably the best solution under the temporary high traffic circumstances through the Nuclear Medicine Service, and seems satisfactory to me.

(3). Failure to perform a survey.

This citation relates to a thyroid uptake measurement of an employee involved in an iodine therapy case that was obtained but not analyzed, primarily because Mr. Bowman was absent from the facilities during the case. At the present time, recruitment is underway for an assistant for Mr. Bowman, with the intention that Mr. Bowman and his assistant will cover each other during vacations and professional leave. In this manner, events such as the non-analysis of thyroid uptake data should not occur in the future.

(4). Failure to implement certain training requirements.

Mr. Bowman has already implemented several institutional programs on radiation safety for employees following the NRC inspection, and plans to initiate several others once he has some help with recruitment of an assistant. Enclosed with this report is a self-instruction manual on radiation safety, together with a sample examination on the material, that we have developed as a training aid in our institution. With the rapid turnover of personnel in heatlh care institutions, training of ancillary personnel on radiation safety issues is a continuing problem everywhere. Nevertheless, I believe that Mr. Bowman's efforts in the training area are reasonable.

(5). Inadequate control of materials upon receipt.

Recently implemented procedures to deposit all radioactive shipments in a locked area, together with training sessions for the nuclear medicine technologists, address this violation in a satisfactory manner in my estimation.

(6). Failure to maintain the minimum number of survey instruments.

The two survey meters that were not present during the NRC inspection, and hence that gave rise to this citation, have been ordered and should arrive shortly.

In addition to reviewing the specific circumstances that resulted in violations during the recent NRC inspection, I also examined several concerns of a more generic nature that are referenced in the correspondence from Mr. Taylor of the NRC dated March 27, 1985. Among these concerns are the following:

(1). The licensee's organization, and assigned responsibilities and authorities within that organization.

The respective roles of the Radiation Safety Committee and the Radiation Safety Officer, and their placement within the administrative hierarchy of the institution, are workable and reasonable. In particular, the reporting responsibility of the Radiation Safety Officer to the Chief of Staff, and through him to the administrative head of the hospital, is appropriate, as is the position of the Radiation Safety Officer as a full member of the Radiation Safety Committee.

(2). The licensee's program for training and retraining individuals working with NRC-licensed materials in NRC regulations, in the conditions of the licenses, and in safe practices for using licensed material.

Although training activities of the licensee had been less than optimum in the past, classes and seminars have now been initiated to address this need, and additional training activities are planned once Mr. Bowman's assistant is identified. The awareness of the need for training and retraining, and recent activities implemented to address this need, imply that this deficiency is being remedied in a satisfactory manner.

(3). The licensee's methods of approving individuals for the use of licensed materials and developing procedures for the safe use of licensed materials.

The aprpoval process for authorized users followed by the Radiation Safety Committee appears satisfactory. Individuals with little experience or training in the safe use of radioactivity are not approved as authorized users; instead they are required to work under the supervision of an approved user. Appropriate mechanisms to identify when such an individual should become an authorized user in his or her own right were discussed with the Radiation Safety Committee and Mr. Bowman during my visit.

(4). The licensee's program for training and qualifying all individuals involved in managing, supervising, inspecting and auditing licensed activities.

Although no formal program exists in this regard, the institution did sponsor Mr. Borman's participation in a 3-month course on health physics at Oak Ridge. In addition, a sum of $1000 has been requested as travel and training support next year for both Mr. Bowman and for his assisiant. Aprpoval of these requests for support of the continuing education effort is strongly recommended.

(5). The licensee's program of surveillances and audits to determine compliance by individual users of licensed materials with NRC regulations, the conditions of the NRC licenses, and the licensee's own procedures for the safe use of radioactive materials.

An auditable agreement has been established between the Radiation Safety Office and the Nuclear Medicine Service that specifies individual responsibilities and obligations with regard to radiation safety. The hospital administration has agreed to provide periodic performance audits of the radiation safety program and the Radiation Safety Office. The Radiation Safety Officer has agreed to periodic review of the NRC licenses and radiation safety procedures to ensure compliance and completeness. These audit and review procedures, implemented since the most recent NRC inspection, should satisfy concerns about surveillances and audits.

(6). The licensee's management of the radiation safety program, including the function of the Radiation Safety Committee and its methods of promoting the program to ensure that problems are identified and that identified problems are properly corrected.

The Radiation Safety Committee meets quarterly, and under the leadership of Dr. Veras, has agreed at these meetings to review the radiation safety program and the performance of the Radiation Safety Officer. The Committee expressed confidence in the performance of Mr. Bowman, and agreed on April 17 to provide close guidance and support for Mr. Bowman.

In my review of the radiation safety program and of the performance of Mr. Bowman, I was impressed by his conscientiousness and by his devotion to the job. It is readily apparent that the space and personnel allocated to radiation safety are inadequate to satisfy the many responsibilities of the operation. Additional space for radiation safety, strategically located adjacent to nuclear medicine and diagnostic radiology, is planned in the near future, and should alleviate the present space problem. The addition of an assistant for Mr. Bowman should enhance the radiation safety program considerably, especially in the areas of training and coverage. A second major personnel need is for a secretary for the radiation safety program. This individual, on at least a half-time basis, is strongly recommended to relieve Mr. Bowman of many rather mundane secreterial and clerical tasks. With the addition of these new personnel, together with the efforts towards improvement of the radiation safety program implemented since the NRC inspection, a radiation safety program of more than satisfactory quality, can be anticipated for the Washington D.C. Veteran's Administration Hospital.

Please let me know if I can be of further assistance.

Sincerely yours,

William R. Hendee, Ph.D.
Professor and Chairman

WRH/mm

University of Colorado Health Sciences Center

University Hospitals
School of Medicine
School of Nursing
School of Dentistry

4200 East Ninth Avenue
Denver, Colorado 80262

May 24, 1985

Mr. John Bowman
Veterans Administration Medical Center
50 Irving Street, NW
Washington, DC 20422

Dear John:

As a followup to our phone conversation of Thursday, May 23, regarding my written report of April 23, I am pleased to comment on Item (6) of page 4:

(6). The licensee's management of the radiation safety program, including the function of the Radiation Safety Committee and its methods of promoting the program to ensure that problems are identified and that identified problems are properly corrected.

In addition to my comments regarding the review of the radiation safety program by the Radiation Safety Committee, I should have mentioned that Dr. Lindeman, Chief of Staff, and/or his administrative assistant meet with the committee, and that all minutes of the Radiation Safety Committee are sent to the Clinical Executive Committee where recommendations of the Radiation Safety Committee are considered for action. This procedure ensures management awareness of and response to the activities of the Radiation Safety Committee and the radiation safety office.

Sincerely yours,

William R. Hendee, Ph.D.
Professor and Chairman

WRH/mm

Medical Center

50 Irving Street, NW.
Washington D.C. 20422

Veterans Administration

In Reply Refer To: 688/115

August 2, 1985

Mr. Thomas T. Martin, Director
Division of Engineering and
Technical Programs
US Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

THRU: Dr. James J. Smith, Director (115)
Nuclear Medicine Service, VAMC

Reference: License Nos. 08-00942-05
08-00942-04
SNM-1605

SUBJ: NRC Inspection No. 85-01

The attached report is provided in accordance with the license modification order issued by the Nuclear Regulatory Commission dated March 27, 1985.

A.A. GAVAZZI
Medical Center Director

Enclosure

120 DAY REPORT

1 Action item completed

Action - Hire and train an assistant Radiation Safety Officer

Status - A full time postion has been created, the position has been advertised, and a selection has been made. We hired Mr. Ronnie Davis as a Health Physicist trainee. Mr. Davis has a B.S. Degree in Radiological Technology. He is in an OJT program that includes specific training in applied health physics.

Action - Establish an audit program for Nuclear Medicine Service.

Status - The Radiation Safety Office has established an audit document for Nuclear Medicine Service.

Action - Establish an audit program for the Radiation Safety Office.

Status - The Medical Center Health Systems Review Organization (HSRO) Coordinator has established and audit protocol for the Radaition Safety Office.

2 Action items to be completed

Action - Provide additional space for the Radiation Safety Office

Status - The Medical Center has reviewed the space requirements of the Radiation Safety Office, considering the new employee, however we have not yet selected appropriate space. We plan to resolve this item and to provide appropriate office space for the Radiation office within six months.

Action - Establish an audit program for Radiation Therapy Service

The Radition Safety Office is Scheduled to complete and audit document for Radiation Safety Service by September 30 1985.

Follow - up item from 1 above:

The HSRO Coordinator has scheduled a preliminary audit of the Radiation Safety Office for September 18, 1985 and has planned a follow-up audit six months later.

An audit of both Nuclear Medicine Service and Radiation Therapy Service will be performed by December 1, 1985. A semi-annual schedule will be established following the first audit.

3 Recommendation considered, but not approved.

We have considered a secretary postition for the Radiation Safety Office in the past. The request for a secretary for the Radiation Safety Office was considered by the Medical Center Resources Committee last year. The Committee decided to place a request on the unfunded needs

list. After reviewing Dr. Hendee's recommendations, we believe that the secretarial functions can be performed adequately by the support provided by Nuclear Medicine Service. We have agreed to provide additional secretarial services, on an "as needed" basis to the Radiation Safety Office through the Quality Asuurance - Utilization Review Office.

II.B. MATERIAL LICENSEES, SEVERITY LEVEL III VIOLATIONS,

NO CIVIL PENALTY

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

DEC 3 1 1985

Docket Nos. 30-09831; 30-10860; 30-19978; 70-01163
License Nos. 20-00805-10; 20-00805-11; 20-00805-13; SNM-1121
EA 85-136

Boston University
ATTN: John Westling
Provost
Charles River Campus
Boston, Massachusetts 02215

Gentlemen:

Subject: NOTICE OF VIOLATION (NRC INSPECTION 85-01)

This refers to the NRC inspection conducted on September 26 and November 18-19, 1985, at your facility in Boston, Massachusetts of activities authorized by your NRC licenses. The report of the inspection was forwarded to you on December 10, 1985. During the inspection, nine violations of NRC requirements were identified under License No. 20-00805-11. On December 18, 1985, we held an enforcement conference with Mr. Dennis Berkey, Vice Provost, other members of your staff, and your consultant, during which these apparent violations, their causes, and your corrective actions were discussed.

The violations indicate a lack of active involvement by the Radiation Safety Committee and the Radiation Safety Officer in monitoring and controlling activities authorized by your broad scope license. For example, NRC licensed materials were being ordered, transferred, and used by unauthorized individuals. Further, authorized individuals were ordering materials without the prior review and approval by the Radiation Safety Officer, as required. Collectively, the violations demonstrate the need for improvement in management control over your licensed activities to assure adherence to NRC requirements and safe performance of licensed activities.

The violations have been classified in the aggregate as a Severity Level III problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985) (Enforcement Policy). Although Violation A could by itself be classified at Severity Level III, in accordance with Section C.1 of Supplement VI of the Enforcement Policy, the violations have been categorized in the aggregate as a Severity Level III problem to focus your attention on their underlying cause: a lack of adequate management control of licensed activities. A civil penalty is considered for a Severity Level III violation or problem. However, after consultation with the Director, Office of Inspection and Enforcement, I have decided not to issue a civil penalty in this case because of your unusually prompt and extensive corrective actions as described during the enforcement conference and your previous good enforcement history. The corrective actions included: (1) the addition of the University Vice Provost and the heads of the three major departments using radioactive material to the Radiation Safety Committee; (2) increased staff to support the Radiation Safety Officer; and (3) relicensing of all users of radioactive materials at the University.

You are required to respond to this letter, and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken, including those described during the enforcement conference, and any additional actions you plan to prevent recurrence. Specifically, you should describe those management controls you have instituted to ensure compliance with NRC requirements, including the specific responsibilities of the Radiation Safety Officer, the Radiation Safety Committee, and your consultant in ensuring adherence to your license and prompt identification and correction of violations when they occur.

After reviewing your response to this Notice, including your corrective actions, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the 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

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

NOTICE OF VIOLATION

Boston University
Boston, Massachusetts 02215

Docket No. 030-10860
License No. 20-00805-11
EA 85-136

An NRC inspection of activities authorized under NRC License Nos. 20-00805-10, 20-00805-11, 20-00805-13 and SNM-1121 was conducted on September 26 and November 18-19, 1985. During the inspection, nine violations of NRC requirements were identified under License No. 20-00805-11. Collectively, these violations indicate that adequate management control and oversight has not been exercised under this licensed program. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the particular violations are set forth below:

A. 10 CFR 20.207(a) requires that licensed material stored in an unrestricted area be secured against unauthorized removal from the place of storage. 10 CFR 20.207(b) requires that licensed materials in an unrestricted area and 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 purpose of protection of individuals from exposure to radiation and radioactive materials.

   Contrary to the above, on both November 18 and 19, 1985, microcurie quantities of licensed materials (hydrogen-3 and carbon-14) were located in Room 513, an unrestricted area, and the materials were neither secured against unauthorized removal nor maintained under constant surveillance and immediate control of the licensee.

B. Condition 12 of License Number 20-00805-11 requires that licensed material be used by, or under the supervision of, individuals designated by the Boston University Radioisotope Committee.

   Contrary to the above, on November 18, 1985, one millicurie of licensed material (hydrogen-3) was possessed and one microcurie was used by an investigator who was neither designated by the Radioisotope Committee nor under the supervision of a designated individual.

C. Condition 21 of License Number 20-00805-11 requires that licensed material be possessed and used in accordance with statements, representations and procedures contained in the application dated March 28, 1980 and July 2, 1982 and letters dated January 6, 1983, December 15, 1983 and January 6, 1984.

1. Item 6 of the letter dated January 6, 1983, requires that orders for radioactive material be approved by the Radiation Safety Office prior to the purchase.

   Contrary to the above, between October 1 and November 18, 1985, three orders of 5 millicuries each of phosphorus-32 were ordered and received without the approval of the Radiation Safety Office prior to purchase.

2. Item 10 of the letter dated January 6, 1983 requires that survey instruments used in a laboratory be calibrated semiannually, and instruments used by the Radiation Safety Office staff be calibrated monthly.

   Contrary to the above, on November 4, 7, 12 and 13, 1985, a survey instrument was used in a laboratory by the biology stockroom manager to survey the radiation levels of incoming packages and the instrument had not been calibrated since January 17, 1985.

3. Item 18 of the letter dated January 6, 1983 states, in part, that drinking in laboratories where radioactive material is used is a violation of university regulations.

   Contrary to the above, on November 18, 1985, a researcher stated that she recently drank coffee in Laboratory 401, an area where radioactive material (hydrogen-3) was used.

4. Item 22.b of the letter dated January 6, 1983, requires that a survey be performed immediately after the use of millicurie quantities of phosphorus-32 and that the survey include dose rates and wipe tests for contamination.

   Contrary to the above, between October 1, 1985 and November 18, 1985, 5 millicuries of phosphorus-32 had been used on two separate occasions in Chemistry Department Laboratory 379, and as of November 18, 1985, the required surveys of the laboratory had not been performed.

5. Item 22.c of the letter dated January 6, 1983, requires that finger ring badges be worn by personnel handling millicurie quantities of phosphorus-32, and Item 7 of the application dated March 28, 1980 requires that each user of radioactive material (other than hydrogen-3) be provided with a film badge to monitor exposure to the whole body or to the skin of the whole body.

   Contrary to the above, in October 1985, a technician handling millicurie quantities of phosphorus-32 on two separate occasions did not wear finger ring badges and was not provided a film badge to monitor exposure to the whole body or the skin of the whole body.

6. Item 9.b of the letter dated January 6, 1983, requires that the records of all phases of the radiation safety program be maintained at Boston University by the Radiation Safety Office.

   Contrary to the above, as of November 18, 1985, records associated with several phases of the radiation safety program specifically but not limited to records pertaining to inventories, personnel dosimetry, and authorization applications were maintained at the office of the Radiation Safety Consultant rather than at Boston University.

D. 10 CFR 20.401(c)(3) requires that each licensee maintain records of disposals of licensed material made pursuant to 10 CFR 20.303.

   Contrary to the above, as of November 18, 1985, records were not maintained of routine monthly disposals of carbon-14 made pursuant to 10 CFR 20.303 to the sanitary sewer from Chemistry Department Laboratory 379.

These violations have been categorized in the aggregate as a Severity Level III problem (Supplements IV and VI).

Pursuant to the provisions of 10 CFR 20.201, Boston University 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 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 31st day of December 1985.

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

DEC 2 0 1985

Docket No. 30-02942
License No. 37-00168-06
EA 85-132

Presbyterian-University of Pennsylvania
Medical Center
ATTN: Ms. Gail Kass
Assistant Hospital Director
for Professional Services
51 North 39th Street
Philadelphia, Pennsylvania 19104

Dear Ms. Kass:

SUBJECT: NOTICE OF VIOLATION (NRC INSPECTION REPORT 85-01)

This refers to the NRC safety inspection conducted on October 15 and 22, 1985 of activities authorized by NRC License No. 37-00168-06. The report of the inspection was forwarded to you on November 7, 1985. During the inspection, twelve violations of NRC requirements were identified. On November 22, 1985, we held an enforcement conference with you and members of your staff during which these violations, their causes, and your corrective actions were discussed.

The number of violations identified during the inspection indicates that adequate management attention has not been provided to the radiation safety program. The violations demonstrate the need for increased and improved management attention to the program to assure adherence to NRC requirements and safe performance of licensed activities.

The violations have been classified in the aggregate as a Severity Level III problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985) (Enforcement Policy), to focus on their underlying cause; namely, a lack of adequate management control of the radiation safety program. Normally, a civil penalty is considered for a Severity Level III violation or problem. However, after consultation with the Director, Office of Inspection and Enforcement, I have decided that a civil penalty should not be proposed in this case because (1) your corrective actions as described at the Enforcement Conference were unusually prompt and extensive, and (2) your previous enforcement history is good.

You are required to respond to the enclosed Notice and should follow the instructions specified in the Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. Specifically, you should describe the changes that have been or will be implemented to improve management control and oversight of your radiation safety program. During the conference on November 22, 1985, you stated that you planned to develop a comprehensive

periodic audit program and an employee re-education program. In your response to this letter, please describe these programs and how they will be used to assure compliance with the conditions of your license. Your reply to this letter and the enclosure, and the results of future inspections, will be considered in determining whether further NRC 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,

James M. Allan

for Thomas E. Murley
Regional Administrator

Enclosure: Notice of Violation

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
Commonwealth of Pennsylvania

NOTICE OF VIOLATION

Presbyterian-University of Pennsylvania
Medical Center
51 North 39th Street
Philadelphia, Pennsylvania 19104

Docket No. 30-02942
License No. 37-00168-06
EA 85-132

An NRC inspection of activities authorized under NRC License No. 37-00168-06 was conducted on October 15 and 22, 1985. During the inspection, twelve violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the particular violations 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. 10 CFR 20.207(b) requires that licensed materials in an unrestricted area and 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,

1. On October 15, 1985, an unrestricted area consisting of an imaging room in the Nuclear Cardiology Laboratory contained licensed material and the imaging room was unlocked, access was not controlled, and the licensed material was neither secured against unauthorized removal nor under constant surveillance and immediate control of the licensee.

2. On October 15 and 22, 1985, an unrestricted area consisting of the Surgical Research Laboratory in Room 105 of the Medical Science Research Laboratory contained licensed material and Room 105 was unlocked, access was not controlled, and the licensed material was neither secured against unauthorized removal nor under constant surveillance and immediate control of the licensee.

3. On October 22, 1985, licensed material was stored in an unlocked refrigerator in the Cardiology Research Laboratory located in an unrestricted area consisting of an open area on the second floor of the Medical Science Research Laboratory, and access to the Cardiology Research Laboratory was not controlled and the licensed material was neither securec against unauthorized removal nor under constant surveillance and immediate control of the licensee.

B. Condition 12 of License No. 37-00168-06 limits the use, or supervision of use, of licensed material to a physician named on the license.

Contrary to the above, on October 15, 1985, individuals not named on the license used licensed material without the supervision of the physician named on the license. The physician was in Chicago, Illinois and not sufficiently close to the hospital in the event that he was needed to personnally supervise a procedure or interpret the results of the procedure.

C. 10 CFR 19.12 requires that all individuals working in restricted areas be instructed in the applicable provisions of the Commission's regulations and of the license.

Contrary to the above, as of October 15, 1985, not all individuals working in restricted areas had been instructed in the applicable provisions of the regulations and conditions of the license in that they were not trained in possession limits, license conditions, radiation safety procedures, Department of Transportation regulations, and NRC regulations.

D. Condition 19 of License No. 37-00168-06 requires that licensed material be possessed and used in accordance with the statements, representations, and procedures contained in an application dated April 22, 1983; letters dated August 12, 1983 and August 30, 1983; and Model ALARA Program contained in Appendix O of Regulatory Guide 10.8 (Rev. 1).

1. Item 6.b of the Model ALARA Program requires that the Radiation Safety Officer (RSO) review the exposure of each individual whose quarterly exposures equal or exceed Investigational Level I (1.875 rem for the extremity) and report the results of the reviews at the first Radiation Safety Committee (RSC) meeting following the quarter when the exposure was recorded. It further requires that the Committee consider each such exposure in comparison with those of others performing similar tasks as an index of ALARA program quality.

   Contrary to the above, from January 1983 to October 1985, a Nuclear Medicine Technologist received exposures to her TLD extremity dosimeter in excess of Investigational Level I during each calendar quarter during this time, and these exposures were neither reported to the Radiation Safety Committee nor compared with those of others performing similar tasks. Specifically, the individual's TLD extremity dosimeter exposure for these calendar quarters ranged from 2.4 - 4.6 rems per calendar quarter.

2. Item 15 of the application dated April 22, 1983, requires that radioactive material be used in accordance with the "General Rules for Safe Use of Radioactive Material" contained in Regulatory Guide 10.8.

   a. Item 4 of these "Rules" requires that syringe shields be used for the preparation and administration of patient doses.

Contrary to the above, on October 15, 1985, syringe shields were not used by the Nuclear Medicine Imaging Supervisor during the drawing of patient doses.

b. Item 5.b of these "Rules" prohibits the storage of food, drink or personal effects with radioactive material.

Contrary to the above, on October 15, 1985, coffee supplies were stored with radioactive materials in a storage area of Room 105 of the Medical Science Research Laboratory.

3. Item 13 of the application dated April 22, 1983, requires that the supervisory Nuclear Medicine Technologist place all orders for radioactive materials and ensure that the requested materials and quantities are authorized by the license and that possession limits are not exceeded.

Contrary to the above, prior to October 15, 1985, radioactive materials were ordered at times by researchers at the Medical Science Research Laboratory and the Sheie Eye Institute, without approval of the supervisory Nuclear Medicine Technologist.

4. Item 17 of the application dated April 22, 1983, requires that all elution, preparation, and injection areas be surveyed daily.

Contrary to the above, as of October 15, 1985, the patient waiting area, where approximately 50 per cent of dose injections are performed, was not surveyed daily.

5. Item 10 of the application dated April 22, 1983, requires that dose calibrators be calibrated in accordance with procedures contained in Appendix D, Section 2, of Regulatory Guide 10.8, as revised by the licensee.

a. Items C.2 and H of Appendix D, Section 2, require that dose calibrators be checked daily with a long-lived standard radionuclide at all commonly used radionuclide settings and that control charts of instrument constancy be maintained.

Contrary to the above, as of October 15, 1985, the dose calibrator was not checked at all commonly used radionuclide settings with a long-lived standard radionuclide, and control charts of instrument constancy were not maintained.

b. Item E.4 of Appendix D, Section 2, as revised by the licensee, requires that, in the test for linearity, the net activity measured for each time interval and the calculated activity for each time interval be plotted versus the time.

Contrary to the above, as of October 15, 1985, the net activity and the calculated activity were not adequately plotted versus time in that although the results were plotted, the technique used was not adequate to detect deviations from linearity.

E. Condition 8.U and 9.U of License No. 37-00168-06 limits the amount of iodine-125 that may be possessed at any one time for laboratory research to a total of one millicurie.

Contrary to the above, on October 15, 1985, approximately 4.9 millicuries of iodine-125 were possessed by the Surgical Research group for laboratory research.

F. 10 CFR 71.5(a) requires that no licensee deliver licensed material to a carrier for transport without complying with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation in 49 CFR Parts 170-189.

49 CFR 173.475(i) requires that prior to each shipment of any package, the shipper ensure by examination or appropriate test that the external radiation and contamination levels are within allowable limits.

Contrary to the above, as of October 15, 1985, Molybdenum-99 generators transferred to a carrier for return to the manufacturer had never been tested for surface contamination levels nor had the external radiation levels been determined.

Collectively, these violations have been categorized as a Severity Level III problem (Supplements IV and VI).

Pursuant to the provisions of 10 CFR 2.201, the Presbyterian-University of Pennsylvania Medical Center is hereby required to submit to this office, within 30 days of the date of this Notice, a written explanation or statement in reply, including for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation, if admitted, (3) 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. Where good cause is shown, consideration will be given to extending the response time.

Dated at King of Prussia, Pennsylvania
this 20TH day of December 1985

NRC FORM 335 (2-84) NRCM 1102, 3201, 3202

U.S. NUCLEAR REGULATORY COMMISSION

BIBLIOGRAPHIC DATA SHEET

SEE INSTRUCTIONS ON THE REVERSE

1. REPORT NUMBER (Assigned by TIDC, add Vol. No., if any)
NUREG-0940
Vol. 4, No. 4

2. TITLE AND SUBTITLE
Enforcement Actions: Significant Actions Resolved
Quarterly Progress Report
(October - December 1985)

3. LEAVE BLANK

4. DATE REPORT COMPLETED
MONTH: February YEAR: 1986

5. AUTHOR(S)
Enforcement Staff

6. DATE REPORT ISSUED
MONTH: February YEAR: 1986

7. PERFORMING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 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)

12. SUPPLEMENTARY NOTES

13. ABSTRACT (200 words or less)
This compilation summarizes significant enforcement actions that have been resolved during one quarterly period (October - December 1985) 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
Technical Specifications, Radiographers, Quality Assurance, Radiation Safety Program, Safety Evaluations

b. IDENTIFIERS/OPEN-ENDED TERMS

15. AVAILABILITY STATEMENT
Unlimited

16. SECURITY CLASSIFICATION
(This page) Unclassified
(This report) Unclassified

17. NUMBER OF PAGES

18. PRICE

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