NUREG-0940
Vol. 1, No. 4

Enforcement Actions: Significant Actions Resolved

Quarterly Progress Report
October - December 1982

U.S. Nuclear Regulatory Commission

Office of Inspection and Enforcement

IE Enforcement Staff

NOTICE

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Manuscript Completed: December 1982
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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 1982) and includes copies of letters, notices, and orders sent by the Nuclear Regulatory Commission to the licensee with respect to the enforcement action. 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. This publication is issued on a quarterly basis to include significant enforcement actions resolved during the preceding quarter.

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ENFORCEMENT ACTIONS SIGNIFICANT ACTIONS RESOLVED
OCTOBER - DECEMBER 1982

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 1982. 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 1982 can be found in the section of this report entitled, "Summaries." Each summary provides the enforcement action number (EA) to identify the case for reference purposes. The supplement number refers to the activity area in which the violations are classified according to guidance furnished in the U.S. Nuclear Regulatory Commission's "General Statement of Policy and Procedure for Enforcement Actions," published in the Federal Register (47 FR 9987, March 9, 1982) and corrected on April 14, 1982 (47 FR 16005). Five levels of severity for each violation show their relative importance within each of the following activity areas:

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

Part I of this report is comprised of copies of completed actions involving reactor licensees, arranged alphabetically. Part II similarly contains actions involving materials licensees.

Actions still pending on December 31, 1982 will be included in future issues of this publication when they have been resolved.

SUMMARIES

I. Reactor Licensees

Duke Power Company, Charlotte, North Carolina
(Oconee Nuclear Station, Unit No. 1), EA 82-65, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $44,000 was issued on June 25, 1982, based on an alleged violation relating to a breach of the containment integrity of the Oconee Unit 1 reactor. The $44,000 penalty was imposed by Order dated October 12, 1982. The penalty was paid on November 15, 1982.

Illinois Power Company, Decatur, Illinois
(Clinton Nuclear Station, Unit No. 1), EA 82-93. Supplement II

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $90,000 was issued on October 6, 1982, based on alleged violations in the electrical area and the licensee's failure to exercise adequate oversight and control of the principal contractor to whom had been delegated the work of establishing and executing quality assurance programs. The penalty was paid on October 19, 1982.

Indiana and Michigan Electric Company, New York, New York
(Donald C. Cook Nuclear Plant, Units 1 and 2), EA 82-03, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $80,000 was issued on December 30, 1981, based on alleged violations relating to the licensee's failure to implement its fire protection program and maintain containment integrity. After consideration of the licensee's response, one proposed violation was withdrawn and two other violations were modified. An Order imposing a mitigated penalty of $52,000 was issued on October 14, 1982. The penalty was paid on November 12, 1982.

Public Service Electric and Gas Company, Newark, New Jersey
(Salem Nuclear Generating Station), EA 82-113, Supplement III

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $40,000 was issued on October 27, 1982, based on an alleged violation relating to an inadequate vital area physical barrier. The penalty was paid on November 18, 1982.

Vermont Yankee Nuclear Power Corporation, Brattleboro, Vermont
(Vermont Yankee Nuclear Power Station). EA 82-112, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $40,000 was issued on October 15, 1982, based on an alleged violation relating to the failure of station personnel to promptly recognize changes in the status of safety-related equipment, and, therefore, to promptly classify and report events in accordance with the emergency plan. The penalty was paid on November 12, 1982.

II. Materials Licensees

Chemplex Company, Rolling Meadows, Illinois,
EA 82-123, Supplement IV

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $500 was issued on December 16, 1982, based on an alleged violation relating to the licensee's failure to ensure that licensed radioactive material stored in an unrestricted area was secured against unauthorized removal. As a result, a 3-millicurie cesium-137 sealed calibration source was either lost or stolen and a timely report was not made to the NRC upon the licensee's discovery of the loss. The penalty was paid on December 21, 1982.

Michigan, University of, Ann Arbor, Michigan,
EA 82-51, Supplement IV

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $2,000 was issued on April 12, 1982, based on alleged violations relating to the licensee's failure to adequately evaluate the discharge of iodine-131 from a hood in the nuclear pharmacy which resulted in concentrations of iodine-131 in excess of permissible limits being released to an unrestricted area. Based on the licensee's response, the penalty was mitigated and an Order imposing a penalty of $1,500 was issued on September 9, 1982. The penalty was paid on October 5, 1982.

Midstate Testing Laboratory, Inc., Hammond, Indiana,
EA 82-94

An Order to Show Cause and Order Suspending License (Effective Immediately) was issued on July 22, 1982, based on the licensee's apparent abandonment of its radiographic facility and its five radiographic exposure devices, three sealed radiography sources, and a soil-moisture probe containing a Ra-Be neutron source. Because the circumstances described in the Order would warrant revocation of a license and the licensee did not file an answer to the Order nor demonstrate why its license should not be revoked, an Order Revoking License was issued on October 14, 1982.

Orion Chemical Company, Provo, Utah,
EA 82-111

An Order to Show Cause and Order Temporarily Suspending License (Effective Immediately) was issued on September 3, 1982, based on alleged violations relating to and the general licensee's refusal to make available to an NRC inspector records of transfer, possession of source material exceeding authorized limits, contamination of areas outside the licensee's premises, and incomplete records of receipt of material. Based on the licensee's response to the Order and the described corrective actions, an Order rescinding the September 3, 1982 Order was issued on October 26, 1982.

Radiodiagnostic Imaging Affiliates of Virginia, Inc., Nashville, Tennessee,
EA 82-105

An Order to Show Cause and Order Modifying License (Effective Immediately) was issued on August 27, 1982, based on alleged violations relating to the licensee's inadequate management of radiation safety matters and failure to possess a required radiation survey meter. Since the licensee instituted adequate corrective measures and showed cause why the license should not be revoked, a Decision on Order to Show Cause and Order Further Modifying License (Effective Immediately) was issued on October 26, 1982.

St. Elizabeth Medical Center, Dayton, Ohio,
EA 82-125, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $4,000 was issued on November 24, 1982, based on alleged violations relating to the failure of the licensee to assure that licensed material was used according to proper radiation protection procedures and that licensed radioactive material in storage was secured as required. As a result, 48 iridium-192 seeds containing approximately 57 millicuries of iridium-192 was either lost or stolen and the licensee failed to report the loss or theft to the NRC within the required time limit. The penalty was paid on December 9, 1982.

I. REACTOR LICENSEES

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

Docket No. 50-269
License No. DPR-38
EA 82-65

JUN 25 1982

Duke Power Company
ATTN: Mr. W. O. Parker, Jr.
Vice President, Steam Production
P. O. Box 2178
Charlotte, NC 28242

Gentlemen:

A special inspection was conducted by inspectors from Region II, U.S. Nuclear Regulatory Commission from March 23 to April 1, 1982 at your Oconee Nuclear Station Unit 1. The purpose of this inspection was to evaluate the safety significance of a breach in Unit 1 reactor building containment integrity discovered by an NRC Region II inspector on March 23, 1982.

The findings from this special inspection indicated that two Technical Specification Limiting Conditions for Operations had been exceeded during the interval from July 1981 to March 1982. These findings were discussed in detail with plant management on April 2, 1982. In addition, an Enforcement Conference was held in the Region II office on May 21, 1982 in which NRC's overall safety concerns relating to this event were discussed. At this meeting it was stated that the immediate cause of these violations was a failure to follow surveillance test procedures.

After consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Forty-four Thousand Dollars. We propose to impose this civil penalty in order to emphasize the need for Duke Power Company to ensure that procedures affecting safe operation of the nuclear plant are meticulously followed and their completions appropriately verified. The base penalty of Forty Thousand Dollars has been increased by Four Thousand Dollars to Forty-four Thousand Dollars to reflect the significance of the violation with respect to its duration.

In preparing your required response, you should follow the instructions specified in the Notice which is enclosed with this letter. We note in your Licensee Event Report (RO-269/82-08) that you have already taken several corrective actions. Your required response should include, as a minimum, a complete description of

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RETURNED RECEIPT REQUESTED

actions taken to ensure that procedures affecting safety-related systems have appropriate signoffs and verifications to preclude future violations of this nature. Your reply 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 enclosure are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James P. O'Reilly

James P. O'Reilly
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
J. E. Smith, Station Manager

JUN 2 5 1982

NOTICE OF VIOLATION

AND

PROPOSED IMPOSITION OF CIVIL PENALTY

Duke Power Company
Oconee Nuclear Station Unit 1

Docket No. 50-269
License No. DPR-38
EA 82-65

As a result of a special inspection conducted by the NRC Region II staff from March 23 to April 1, 1982 at the Oconee Nuclear Station Unit 1 near Seneca, South Carolina, it appears that a violation of NRC requirements occurred. The inspection findings were discussed with the station management at the conclusion of the inspection. NRC concerns regarding the violation were the subject of an Enforcement Conference held at the Region II office in Atlanta on May 21, 1982 with officials of the Duke Power Company.

On March 23, 1982, the NRC Resident Inspector found that an instrument test connection cap had been left off a one-quarter-inch instrument calibration line connected to the instrument sensing line that provided a direct pathway between the Unit 1 reactor building atmosphere and the penetration room. The licensee immediately replaced the cap and thereby restored the reactor building containment integrity. Licensee investigation revealed that most probably the individual who had calibrated the associated pressure switch on July 9, 1981 had failed to replace the calibration line cap. As a result of this failure, containment integrity was violated and the reactor building spray initiation system was degraded during certain periods in the July 9, 1981 to March 23, 1982 interval.

To emphasize the need for the licensee to ensure that procedures affecting safe operation of the plant are meticulously followed, the NRC proposes to impose a civil penalty of Forty-four Thousand Dollars for this matter. The base penalty for a violation of the severity level of this event is $40,000, as determined from Tables 1A and 1B of the NRC Enforcement Policy (10 CFR Part 2, Appendix C) 47 FR 9987 (March 9, 1982). Because of the duration of this event the civil penalty has been increased by Four Thousand Dollars. In accordance with the NRC Enforcement Policy and 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 Specification 3.6.1 requires that containment integrity be maintained whenever reactor coolant system (RCS) pressure is greater than 300 psig and temperature is greater than 200°F.

Technical Specification 3.5.1 requires that all three channels of both trains of reactor building spray initiation be operable when the reactor is critical.

Technical Specification 6.4.1 requires that the plant be maintained in accordance with approved procedures. Procedure IP/O/A/310/5D was established and approved to implement 6.4.1. Step 10.2.10 of the procedure requires replacement of the cap on the 1/4-inch calibration line connected to the 1/2-inch sensing line for reactor building pressure switch 1PS-22.

Contrary to the above, on July 9, 1981, the licensee failed to follow step 10.2.10 of procedure IP/O/A/310/5D. As result of the failure the following conditions existed between July 9, 1981 and March 23, 1982.

1. Containment integrity of the Unit I reactor building was not maintained for fifty-one days while RCS pressure was greater than 300 psig and temperature was greater than 200°F.

2. For thirty-two days, one of three channels of Train A of reactor building spray initiation for Unit I was inoperable while the reactor was critical.

This is a Severity Level III violation (Supplement I).
(Civil Penalty - $44,000).

Pursuant to the provisions of 10 CFR 2.201, Duke Power Company 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 II, within thirty days of the date of this Notice, a written statement or explanation in reply, including for the violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Duke Power Company may pay the civil penalty of $44,000 or may protest imposition of the civil penalty in whole or in part by a written answer. Should Duke Power Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement will issue an order imposing the civil penalty proposed above. Should Duke Power Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer may: (1) deny the violation presented in this Notice in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty. In requesting mitigation of the proposed penalty, the five factors contained in Section IV(B) of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., giving page and paragraph numbers) to avoid repetition. Duke Power Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

FOR THE NUCLEAR REGULATORY COMMISSION

James P. O'Reilly

James P. O'Reilly
Regional Administrator

Dated at Atlanta, Georgia
this 25th day of June 1982

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

Docket No. 50-269
License No. DPR-38
EA 82-65

OCT 12 1982

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

Gentlemen:

This refers to your letters of July 23, 1982 and September 15, 1982 in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you with our letter of June 25, 1982. Our June 25 letter concerned a violation found by our Resident Inspector on March 23, 1982, during a special inspection conducted on March 23 - April 1, 1982 of activities at the Oconee Nuclear Station, Unit No. 1. The circumstances are contained in Region II Inspection Report No. 50-269/82-11.

After careful consideration of your response, we have concluded that the civil penalty as proposed is appropriate for the reasons given in the enclosed Order. However, with regard to the condition identified as Item 2 in the Notice, we agree with your argument, based on tests you performed on July 1, 1982, that the initiating channel for the reactor building spray system was operable within Technical Specification limits even with the cap missing from the instrument test tee. Therefore, Item 2 in the Notice of Violation and Proposed Imposition of Civil Penalty is hereby withdrawn.

Our letter which transmitted the Notice of Violation and Proposed Imposition of Civil Penalty indicated that the penalty was being proposed to emphasize the need to ensure that procedures affecting safe operation were meticulously followed. We note that although your response addressed the conditions created by the failure to follow an approved procedure and also discussed procedural revisions, it did not describe corrective actions planned or taken to ensure that procedures are meticulously followed in accordance with your Technical Specifications. Therefore, please provide, within thirty days from the date of this letter, an additional response to the Notice of Violation which includes the information required by 10 CFR 2.201 relative to the failure to follow procedures.

Your attention is also invited to Paragraph D.2 of the Appendix to the Order (Evaluations and Conclusions) which describes the implementation of the NRC Confirmatory Order, dated July 10, 1981, directing Duke Power Company to take certain actions described in NUREG-0737. You are requested to reexamine your program for independent verification of correct performance of operating activities to ensure that the required verifications are performed in accordance with I.C.6 of NUREG-0737.

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RETURN RECEIPT REQUESTED

With regard to your concern about the issuance of a public announcement by the NRC at the time civil penalties are proposed, that issue will be addressed in separate correspondence.

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

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

Sincerely,

James H. Sniezek /ff

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Order Imposing Civil Monetary
Penalty

cc w/encl:
J. E. Smith, Station Manager

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Duke Power Company	)	Docket No. 50-269
Oconee Nuclear Station	)	License No. DPR-38
(Unit 1)	)	EA 82-07

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Duke Power Company, 422 South Church Street, Charlotte, North Carolina, 28242 (the "licensee") is the holder of License No. DPR-38 (the "license") issued by the Nuclear Regulatory Commission (the "Commission"). The license authorizes operation of the Oconee Nuclear Station Unit 1 facility in Oconee County, South Carolina under certain specified conditions and is due to expire on November 6, 2007.

II

An inspection of the licensee's activities under the license was conducted on March 23 - April 1, 1982 at the OCONEE NUCLEAR STATION UNIT 1 facility in Oconee County, South Carolina. As a result of this inspection, it appears that the licensee has not conducted its activities in full compliance with the conditions of its license. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated June 23, 1982. The Notice stated the nature of the violation, the provision of the license condition which the licensee had violated, and the amount of civil penalty imposed for the violation. Answers dated July 23, 1982 and September 15, 1982 to the Notice of Violation and Proposed Imposition of Civil Penalty were received from the licensee.

III

Upon consideration of the answers received and the statements of fact, explanation, and arguments for remission or mitigation of the proposed civil penalty contained therein, as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined that the penalty proposed for the violation in the Notice of Violation and Proposed Imposition of Civil Penalty should be imposed. The Director agrees with the licensee's denial of the condition described as Item 2 in the violation in the Notice of Violation and Proposed Imposition of Civil Penalty and withdraws that portion of the violation dealing with the inoperability of one of these channels of the reactor building spray initiation system.

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 Forty-Four Thousand Dollars within thirty days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director of the Office of Inspection and Enforcement, U.S.NRC,Washington, DC 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. If a hearing is requested, the Commission will issue an Order designating the time and place of hearing. Upon failure of the licensee to request a hearing within thirty days of the date of this Order, the provisions of this Order shall be effective without further proceedings; if payment has not been made by that time, the matter may be referred to the Attorney General for collection.

VI

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

(a) whether the licensee violated NRC license conditions as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty as amended by Section III of this Order; and,

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

FOR THE NUCLEAR REGULATORY COMMISSION

James H Sniezek/acting

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 12th day of October 1982

APPENDIX

EVALUATIONS AND CONCLUSIONS

For the violation and associated civil penalty identified in the Notice of Violation and Proposed Imposition of Civil Penalty for Duke Power Company's Oconee station (Unit 1) dated June 23, 1982 the originial violation is restated and the NRC's evaluation and conclusion regarding the licensee's responses (dated July 23, 1982 and September 15, 1982) is presented.

ORIGINAL STATEMENT OF NONCOMPLIANCE

Technical Specification 3.6.1 requires that containment integrity be maintained whenever reactor coolant system (RCS) pressure is greater than 300 psig and temperature is greater than 200°F.

Technical Specification 3.5.1 requires that all three channels of both trains of reactor building spray initiation be operable when the reactor is critical.

Technical Specification 6.4.1 requires that the plant be maintained in accordance with approved procedures. Procedure IP/0/A/310/5D was established and approved to implement 6.4.1. Step 10.2.3 of the procedure requires replacement of the cap on the 1/4-inch calibration line connected to the 1/2-inch sensing line for reactor building pressure switch 1PS-22.

Contrary to the above, on July 9, 1981, the licensee failed to follow step 10.2.3 of procedure IP/0/A/310/5D. As a result of the failure the following conditions existed between July 9, 1981 and March 23, 1982:

1. Containment integrity of the Unit 1 reactor building was not maintained for fifty-one days while RCS pressure was greater than 300 psig and temperature was greater than 200°F.

2. For thirty-two days, one of three channels of Train A of reactor building spray initiation for Unit 1 was inoperable while the reactor was critical.

EVALUATION AND CONCLUSIONS

A. Violation

The licensee admitted its employees failed to follow required procedures when calibrating reactor building pressure switch 1PS-22 which is the underlying violation for which the civil penalty was proposed. The licensee further admitted that containment integrity was not maintained. However, the licensee denied that the reactor building spray initiation channel was rendered inoperable by the missing cap.

Following receipt of the Notice of Violation and Proposed Imposition of Civil Penalty, the licensee conducted a special test and determined that pressure switch 1PS-22 would actuate at approximately 22 psig which, while greater than the nominal 10 psig setting, is within the Technical Specification required value of 30 psig. Since the channel would operate within the requirements of the Technical Specification, the NRC agrees that Item 2 in the violation should be withdrawn.

B. Assessment of Severity Level

The licensee argued that the violation should have been categorized at a Severity Level IV because the potential increase in the offsite dose in the event of an accident would have been negligible. While offsite dose consequences are a factor in determining the safety significance of a violation, they are not the only factor. In this case, the safety significance lies primarily in the failure of the licensee's administrative and management controls to ensure that procedures affecting safe operation were meticulously followed for equipment important to safety which the staff believes is cause for significant regulatory concern. In the present case the failure to follow procedures resulted in a degradation of containment integrity, a violation of a limiting condition for operation (LCO) and had the potential to preclude operation of a pressure switch in the reactor building spray initiation system which would have violated yet another LCO.

The licensee argued that while Technical Specification 3.6.1 requiring containment integrity was violated, the breach in containment would not have resulted in a significant increase in the potential radiological impact on the health and safety of the public at the site boundary in the event of a design basis accident. The NRC agrees.[1] Nevertheless, in the event of an accident, the breach in containment integrity could have resulted in some additional release and this is of concern to the NRC because it could have been avoided. Furthermore, the licensee did not address the potential for increased exposure of plant personnel had entry into the penetration room been required following an accident. The NRC believes that such exposures could be significant. In addition, it was fortuitous that both the pressure switch remained functional and the size of the containment breach restricted the potential radiological impact in the event of an accident. Had failure to follow a procedure involved a larger containment penetration, the potential radiological consequences could have been large and could have resulted in the violation being characterized as a Severity Level II, in that the containment would not only have been degraded, but would have been unable to perform its intended safety function.

Therefore, the staff has concluded that the violation was properly categorized as a Severity Level III.

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[1] While the staff agrees with the licensee's conclusion based on the calculations performed, the licensee should have used the maximum hypothetical accident as the basis for its analysis instead of the design basis loss of coolant accident. See Technical Information Document 14844, "Calculation of Distance Factors for Power and Test Reactor Sites."

C. Assessment of the Civil Penalty

Notwithstanding the withdrawal of the spray initiation channel operability portion of the violation, the underlying procedural violation of Technical Specification 6.4.1 remains significant. Therefore, unless mitigation were appropriate, the staff would conclude that a civil penalty should be imposed.

D. Mitigation Factors

1. Self-Identification

The licensee asserts that it identified the problem with its procedures in January, 1982, that corrective action was taken at that time, and that mitigation on that basis is required. However, the need for independent verfication had been previously identified by the NRC in NUREG-0585 and NUREG-0737, which were issued in November, 1979 and November, 1980, respectively, as a result of lessons learned from the Three Mile Island accident. Both recommended, among other things, that licensee's procedures "be reviewed and revised, as necessary, to assure an effective system of verifying the correct performance of operating activities is provided as a means of reducing human errors." Both documents specifically referred to "human verification of operations and maintenance independent of the people performing the activity" (Emphasis added).

These provisions have been the subject of extensive correspondence over the past two years and of a Confirmatory Order issued on July 10, 1981. Thus, we do not believe any credit should be given to the licensee for identifying the need for independent verification in January, 1982.

2. Corrective Action

The licensee claims that following its identification of the potential problem with failure of procedures to require independent verification, it took prompt and appropriate corrective actions to preclude repetition by changing its procedures. Two points indicate otherwise. First, the licensee provided, as a part of the response, a copy of a memorandum from a site supervisor to his staff which required independent verification by persons other than those doing the work. This memorandum was limited in application to those supervised by the author and thus did not precipitate or ensure generic corrective actions in other groups at the Oconee site. Further, the instructions were not provided in a controlled document within the meaning of 10 CFR 50, Appendix B, Criterion VI which would assure that future employees would be informed of and understand the meaning of "independent verification."

Second, it is noted that while Oconee procedures imply an independent verification by the inclusion of two sign-off spaces on data sheets, neither the body of the procedure nor any administrative control explicitly establishes the meaning or significance of this entry.

Therefore, we do not believe that action taken was unusually prompt or extensive and no mitigation based on corrective action is warranted.

3. Enforcement History, Prior Notice and Multiple Examples

These factors were not used to increase the civil penalty above the base amount and the Policy does not provide for mitigation on the basis of the absence of these factors.

Based on the above, the staff concludes that the civil penalty should not be mitigated.

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

October 5, 1982

Docket No. 50-461
EA 82-93

Illinois Power Company
ATTN: Mr. W. C. Gerstner
Executive Vice President
500 South 27th Street
Decatur, IL 62525

Gentlemen:

This refers to the investigation conducted by Region III during the period January 5 to March 3, 1982, of electrical construction activities at the Clinton Nuclear Power Station. The investigation was initiated as a result of allegations made to the NRC senior resident inspector at the Clinton site. The allegations were made by several electrical quality control (QC) inspectors who are employed by Baldwin Associates, your principal contractor.

The findings of the investigation reveal a breakdown of your quality assurance (QA) program, as related to electrical construction. This is evidenced by numerous examples of noncompliance with eleven of the eighteen criteria for a quality assurance program as set forth in Appendix B of 10 CFR Part 50. As a result of preliminary investigation findings, Illinois Power Company issued a Stop Work Order for specified electrical construction activities. On January 27, 1982, the Region III Office issued a Confirmatory Action Letter addressing the Stop Work Order and describing programmatic changes that would be necessary prior to the resumption of such work. The principal cause of the breakdown, in our view, was Illinois Power Company's failure to exercise adequate oversight and control over its principal contractor to whom the work of establishing and executing quality assurance programs had been delegated.

Another finding of significant concern to us relates to the intimidation of quality control inspectors by Baldwin Associates management personnel. This is clearly a barrier to effective implementation of a quality assurance program and results in the loss of the organizational independence

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

described in Criterion I of Appendix B to 10 CFR Part 50. The importance of this matter is reflected in the recent amendment (Public Law 96-295, June 30, 1980) to the Atomic Energy Act of 1954, which added Section 235 relating to protection of nuclear inspectors such as your contractor's quality control inspectors. The safety significance of the above matters was initially discussed during a management meeting on January 29, 1982, attended by you and members of your staff and by NRC representatives from the Office of Nuclear Reactor Regulation and the Region III Office. We acknowledge that you initiated corrective action immediately following the January 29 meeting. These matters were further discussed on April 8, 1982, during an enforcement conference in the Region III Office between members of your staff and the Region III staff.

In order to emphasize the need for licensees to maintain a work atmosphere where quality assurance personnel are not intimidated, and to assure implementation of an effective quality assurance program that identifies and corrects construction deficiencies, we propose to impose civil penalties for the items set forth in the Appendix to this letter. The violations in the Appendix have been categorized at the severity levels described in the NRC Enforcement Policy published in the Federal Register, 47 FR 9987 (March 9, 1982). The base value for each of the two Severity Level III violations is $40,000. However, after considering the circumstances of the violations, and the multiple occurrences, we are increasing the amount of the civil penalty for Violation B to $50,000. After consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of a Civil Penalty in the cumulative amount of Ninety Thousand Dollars. I am particularly concerned by the number of instances where Baldwin Associates electrical QC supervisors took disposition actions which were not consistent with established QC program procedures, and the instances where Baldwin electrical construction staff apparently ignored QC stop work actions. Instances such as these raise questions on the effectiveness of the Baldwin project administration, and the Illinois Power Company quality assurance program.

You are required to respond to this letter and should follow the instructions in the Appendix when preparing your response. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

In accordance with 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 Appendix are not subject to the clearance procedures of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James G. Keppler
Regional Administrator

Enclosure: Notice of Violation
and Proposed Imposition of
Civil Penalties

cc w/encl:
DMB/Document Control Desk (RIDS)
Resident Inspector, RIII
Karen Borgstadt, Office of
Assistant Attorney General
Gary N. Wright, Manager,
Nuclear Facility Safety
Randall L. Plant, Prairie
Alliance

NOTICE OF VIOLATION

AND

PROPOSED IMPOSITION OF CIVIL PENALTIES

Illinois Power Company
Clinton Nuclear Power Station

Docket No. 50-461
Construction Permit No. CPPR-137

As a result of the investigation conducted at the Clinton Nuclear Power Station in Clinton, Illinois from January 5 to March 3, 1982, multiple examples of the violations listed below were identified. The numerous examples of these violations demonstrate Illinois Power Company's (IP's) failure to exercise adequate oversight and control of their principal contractor, Baldwin Associates (BA), to whom they had delegated the work of establishing and executing quality assurance programs, and thereby fulfill their responsibility for assuring the effective execution of a quality assurance (QA) program. This failure manifested itself in intimidation of quality control (QC) inspectors and in a widespread breakdown in the implementation of the quality assurance program in the electrical area.

Because of the significance of failing to maintain a work environment where quality assurance personnel are free from intimidation, and not assuring implementation of an effective quality assurance program which identifies and corrects construction deficiencies in the electrical area and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C) 47 FR 9987 (March 9, 1982), the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, and 10 CFR 2.205 in the amounts set forth for the violations listed below.

A. 10 CFR 50, Appendix B, Criterion I states, in part, "The applicant may delegate to others, such as contractors, agents, or consultants, the work of establishing and executing the quality assurance program, or any part thereof, but shall retain responsibility therefor....The persons... performing quality assurance functions shall have sufficient authority and organizational freedom to identify quality programs...including sufficient independence from cost and schedule."

The Clinton Power Station Quality Assurance Manual, Chapter 1, Paragraph B.2 states, "Quality assurance organizations shall have sufficient freedom to identify quality problems; initiate, recommend, or provide solutions; to verify implementation of solutions; and to control further processing, delivery, installation, or utilization of nonconforming materials or items until proper dispositioning has occurred."

Contrary to the above, Baldwin Associates QC inspectors did not have sufficient freedom to identify quality problems and were not sufficiently independent of cost and schedule. The results of interviews indicate that some QC inspectors were: (a) instructed by supervisors not to engage in discussions with NRC without approval from the BA Quality Control Manager; (b) not always supported by QC management; and (c) intimidated. The following are examples of insufficient freedom of QC inspectors, including insufficient freedom from cost and schedule, which occurred during December 1981 and January 1982:

1. Communications between BA QC inspectors and NRC personnel regarding QC activities were hampered by the actions of BA QC management, in that, on January 26, 1982, QC inspectors were approached by NRC representatives in the QC field office to obtain information regarding a mechanically assisted cable pull. The QC inspectors advised the NRC personnel that they could not engage in any discussions with the NRC without approval from the BA Quality Control Manager.

2. A discharged BA QC inspector stated under oath on January 27, 1982 that he was instructed not to spend time with NRC personnel because BA QC management believed he was providing too much information, and that part of the reason he was fired was for giving information to the NRC. Another BA QC inspector stated he felt he was fired for giving information to the NRC.

3. The discharge of two BA Quality Control inspectors on January 26, 1982, during the course of the NRC investigation was perceived by other BA Quality Control inspectors as being at least in part the result of their having provided information to the NRC and their discharges had a chilling effect on BA QC inspectors prior to the rehiring of the individuals.

4. A BA QC inspector stated he felt intimidated by a BA QC supervisor into initialing his acceptance on a traveler. Although denied by the supervisor, two other individuals stated it was their perception undue pressure was exerted on the inspector by their supervisor.

5. BA QC inspectors were told by a BA QC supervisor that their primary function was to support the crafts.

6. A verbal STOP WORK Order issued by a BA QC inspector on January 6, 1982, as requested by an IP QA engineer during a power-assisted cable pull, was overridden by BA construction supervision.

7. During a cable pull on January 6, 1982, the BA electrical superintendent in charge of the pull intimidated an IP QA engineer with cost aspects if he pursued his request to install additional tensiometers by telling the IP QA engineer that he would have to accept responsibility for authorizing the additional time and money to install the tensiometers and complete the pull.

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

(Civil Penalty - $40,000).

B. 10 CFR 50, Appendix B, Criterion II, requires holders of construction permits for nuclear power plants to document, by written policies, procedures, or instructions, a quality assurance program which complies with the requirements of Appendix B for all activities affecting the quality of safety-related structures, systems, and components and to implement that program in accordance with those documents.

The Clinton Power Station QA Manual, Chapter 2, Paragraph B.5 states, "Activities affecting quality and the conditions under which these activities are performed shall be controlled."

Contrary to the above, Illinois Power Company and its contractor, Baldwin Associates, did not adequately document and implement a quality assurance program in the electrical area and in areas which impacted on the electrical areas to comply with the requirements of Appendix B as evidenced by the following examples:

1. 10 CFR 50, Appendix B, Criterion III states, in part, "Measures shall be established to assure that applicable regulatory requirements and the design basis...are correctly translated into specifications, drawings, procedures, and instructions."

Criterion III also states, in part, "Measures shall be established for the identification and control of design interfaces and for coordination among participating design organizations."

The Clinton Power Station QA Manual, Chapter 3, Paragraph B.2 states, in part, "Design basis, regulatory requirements...shall be adequately translated into the various design documents." Chapter 3, Paragraph B.4 states, in part, "Interfaces within and between each design organization shall be controlled with adequate procedures to assure that there is no conflict in design objectives."

(a) Contrary to the above, measures did not assure that the applicable regulatory requirements were correctly translated into specifications, drawings, procedures, and instructions. For example, the requirements of Regulatory Guide 1.29, "Seismic Design Classification", as adopted in the Clinton Power Station FSAR, Paragraph 8.1.6.1.4 were not incorporated in the fire protection piping installation specifications, K2856, nor on the installation drawings, Contract No. 32-1240 SH, 23 sheets. As a result, fire protection piping which was not seismically qualified was not adequately separated from safety-related electrical raceways.

(b) Contrary to the above, the design interface and coordination between the architect engineer's piping and electrical design groups was not properly controlled. For example: the fire protection piping installation contractor, while working from approved drawings in the cable spread room, could not install 4" piping due to interference with safety-related 2" conduit and pull box 1P0119, and in two instances NRC inspectors observed, pipe hangers for 2" piping had been bent to fit around the installed safety-related conduit. Two instances were observed by NRC inspectors where non-seismically supported (Category II) piping was within 3", minimum of 11" required, of seismically supported (Category I) safety-related raceway.

(c) Contrary to the above, Paragraph 3.2 of Sargent and Lundy Standard STD-EA-122, which is referenced in Electrical Installation Specification K2999, and which requires that cable trays and hangers should be braced during the pulling operations to provide pulling tension reaction, was not translated into the Cable Installation Procedure, BAP 3.3.2, as a prerequisite to pulling cables. As a result, cables were installed in cable trays 1-H13P-714A, 1-H13P-714B, 1-H13-742E, 1-H13P-742F, 1-H13P-742A, and 1-H13P-717A which were not braced (attached) to their support hangers.

(d) Contrary to the above, Paragraph 903.1.e of Electrical Installation Specification K2999 states, "The greater part of the total length of most cables will be installed in cable trays, but extensions from trays to equipment shall be installed in conduits. In certain cases, the required conduit extensions from the cable trays to equipment may not be shown on the drawings, but Contractor shall install the necessary conduit." This specification was not translated into Raceway Installation Procedure BAP 3.3.1, nor as a prerequisite to pulling cables in the Cable Installation Procedure BAP 3.3.2. As a result 21 cables extending from cable trays into 4160V switchgear 1A1 were not installed in conduits, and 17 cables extending from cable trays into HPCS panel E22-S004 were not installed in conduits.

2. 10 CFR 50, Appendix B, Criterion V states, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, or a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

The Clinton Power Station QA Manual, Chapter 5, Paragraphs B.1 and B.2 states, "Written procedures, instructions, and drawings shall be developed and used, as appropriate, for activities affecting quality. Instructions, procedures, and drawings shall include applicable qualitative and quantitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Contrary to the above, documented instructions were not adequately prescribed in travelers or were not adequately documented in travelers for electrical penetrations 1EE-01E, 1EE-02E, 1EE-03E, 1EE-05E, 1EE-06E, 1EE-07E, 1EE-14E, and 1EE-18E in that vital steps and data as required by Specification K2978, "Installation Manual for Electrical Penetration Assemblies," were omitted from the travelers or required data was not entered. For example:

(a) Inert gas pressure was not recorded as required by Paragraph 6.10 of the specifications.

(b) Paragraphs 6.11 through 6.16 of the specifications were omitted in the subject travelers. These paragraphs address the detailed instructions and handling precautions necessary for the removal of the penetrations from their shipping container and the installation of the penetrations in the nozzle.

(c) Paragraphs 6.27 through 6.31 of the specifications require that the primary and secondary header plate bolts be torqued, using a calibrated torque wrench. The torque values, torque wrench number, and torque wrench calibration due date were not recorded on the subject travelers nor on any documents attached to the travelers. Therefore, it could not be determined that a calibrated torque wrench was used to torque the primary and secondary header plate bolts.

(d) Paragraphs 6.33.1 through 6.33.15 "Blind Flange Installation" and Section 9.0 "Installation of Pressure Switch, Pressure Gauge, and Fill Valve" and 10.0 "Electrical Tests" of the specifications were omitted from the travelers.

(e) During the leak rate test, Paragraphs 7.3 and 7.5 of the specifications require that the pressure gauge reading, temperature adjacent to the penetration, and the time and date be recorded. Gauge number, gauge calibration due date and temperature readings were not recorded on the subject travelers nor on any documents attached to the travelers.

3. 10 CFR 50, Appendix B, Criterion VI states, in part, "Measures shall be established to control the issuance of documents, such as instructions, procedures, and drawings, including changes thereto, which prescribe all activities affecting quality.... Changes to documents shall be reviewed and approved by the same organizations that performed the original review and approval unless the applicant designates another responsible organization."

The Clinton Power Station QA Manual, Chapter 6, Paragraphs B1 and 2 states, in part, "Documents shall be reviewed for adequacy by appropriately qualified personnel, approved for issue and use by authorized personnel....Changes to documents shall be subject to the same degree of control as applied to the original documents."

Contrary to the above, Quality Control Instruction QCI-401, "Raceway Hanger/Support Fabrication/Installation Inspection," was revised by Baldwin Associates Interoffice Memorandum QCE-81-032, dated September 23, 1981, and Quality Control Instruction QCI-403, "Cable Tray/Conduit Installation Inspection Criteria," was revised by Baldwin Associates interoffice Memorandum QCE-81-012 dated June 9, 1981. The subject interoffice memoranda did not receive the same level of approval (i.e., QC Manager and the Quality and Technical Service Manager) as the quality control instructions they revised, nor were they controlled in accordance with BA's Document Control Procedure BAP2.0.

4. 10 CFR 50, Appendix B, Criterion VII states in part, "Measures shall be established to assure that purchased material, equipment, and services, whether purchased directly or through contractors and subcontractors, conform to the procurement documents."

Specification K2980 specifies the requirements for the procurement of cable trays and supports. Paragraph 2.2 of Form 1895-E, which is referenced in this specification, states in part, "Poorly galvanized work shall be rejected by the Purchaser."

Contrary to the above, NRC inspectors observed numerous raceway sections stored in laydown areas and sections of installed raceway, some with cable in them, which did not meet the requirements of the purchase documents and which had not been rejected and were not identified with "hold" or "reject" tags to indicate they were nonconforming.

5. 10 CFR 50, Appendix B, Criterion IX states, "Measures shall be established to assure that special processes, including welding, heat treating, and nondestructive testing, are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements."

The Clinton Power Station QA Manual, Chapter 9 states, in part, "Purpose - To establish requirements assuring that special processes are performed under adequate controls and that procedures governing these processes are established in accordance with applicable codes...."

The note under Paragraph 8.8 of Specification K2978 requires that the welding of the secondary header plate and enclosure mounting ring be in accordance with the ASME Boiler and Pressure Vessel Code (ASME Code), Section III.

Paragraph 6.2.1 of BA Technical Services Procedure BTS 402, "Weld Control" states, in part, "On all ASME related work, the Technical Services Welding Technician/Inspector will record the welder's unique identification number on the traveler, and cross reference the traveler information to the BTSF-030 Form (Weld Material Field Requisition)."

Baldwin Associates Procedure BAP 2.19, "Control of Welding Filler Materials," Paragraph 5.1 states, in part, "The Discipline Superintendent shall direct welders to retain the pink copy of the Welding Material Field Requisition, Form JV-200, in order that the appropriate Technical Services Inspector may transcribe the heat/lot number and welder's symbol to the documentation form relating to the weldment of the traveler and also enter traveler information on the pink copy, sign and date it. Unused welding material and the pink copy of Form JV200 shall be returned to the issuing WMFCC attendant for documentation of the welding materials returned."

Contrary to the above, measures did not assure that special processes were properly controlled. For example:

a. Weld filler material heat/lot number was not recorded on travelers for electrical penetrations 1EE-01E, 1EE-02E, 1EE-03E, 1EE-05E, 1EE-06E, 1EE-07E, 1EE-14E, and 1EE-18E.

b. The Technical Services inspector did not enter traveler information, sign and date Weld Material Field Requisition Serial Nos. 051477, 051478, 051458, 051439, 051399, and

051400. Welder V-16 was issued weld filler metal on these requisitions between November 25, 1980 and December 1, 1980, and during this period he performed welding on the above electrical penetrations.

6. 10 CFR 50, Appendix B, Criterion X states, in part, "A program for inspection of activities affecting quality shall be established and executed...to verify conformance with the documented instructions, procedures, and drawings for accomplishing the activity."

The Clinton Power Station QA Manual, Chapter 10, Paragraph B.8 states, "In-process and/or final inspections shall verify that the specified requirements have been met."

Contrary to the above, a program for inspection of activities affecting quality was not properly executed as demonstrated by the fact that NRC findings had not been identified by quality control inspections. Examples of missed nonconforming conditions are:

a. Conduit installation bushings were not installed in conduits C0843*, C0884, five conduits used to extend cables (drop-outs) from cable trays into panel E22-S004* (both ends), five drop-outs in tray end at trays 16351E-K1E and 16352E-K1E (two have cable installed), and three drop-outs in tray 10702F-K3E per the requirements of the Electrical Specifications, K2999, Paragraph 903.1.j.

*Indicates that cables have been installed.

b. The 21 cables extending from cable trays into the 4160V switchgear 1A1, and the 17 cables extending from cable trays into the HPCS panel E22-S004, were not installed in conduit per the requirements of the Electrical Specifications, K2999, Paragraph 903.1.e.

c. A metal plate was stored on top of electrical cables in cable tray 19122E-C3E and the sharp edge of a cable tray cover was resting on electrical cables in tray 16336B-C1E which is contrary to the requirements of Electrical Specification, K2999, Paragraph 801.4.

d. Coiled electrical cables 1LV14M, 1LV14K, 1LV14J, and 1RP35B inside panel H13-P702 and four coiled electrical cables in tray 10702E-C3E were not properly supported in accordance with Baldwin Associates Procedure BAP3.3.2, "Cable Installation," Paragraphs 5.8.3.e and 5.8.4.

e. The minimum bend radius was violated for cable 1HP02F in cable tray 10702F-K3E at conduit C0843 and for an unidentified 2C/12 cable in tray 10702E-C3E per the requirements of the Electrical Specifications, K2999, Paragraph 1002.2, S&L standard STD-EA-122, Paragraph 3.9, and Baldwin Associates Procedure BAP 3.3.2, "Cable Installation," Paragraph 5.8.2.c.

f. Electrical cables were not properly supported in risers 10R167-C3E, 10R168-C3E, and 10R138-C2E in accordance with Baldwin Associates Procedure BAP 3.3.2, "Cable Installation," Paragraph 5.8.3.c and 5.8.4 and S&L Standards STD-EA-122 and STD-EB-200, Paragraph 3.10.

g. The ends were not sealed on electrical cables 1SX53J and 1VQ25B in motor control center 1A2, Section 1AP73E, as required by Baldwin Associates Procedures BAP 3.3.2, "Cable Installation," Paragraphs 5.5.1c, 5.8.3.b and 5.8.4.

h. Two cable jackets were damaged in cable tray 16358B-C1E at riser 16R102-C1E and were not identified during the post-pull inspection in violation of Baldwin Associates Procedure BAP 3.3.2, "Cable Installation," Paragraph 5.8.4.

i. Three coiled cables (each approximately 100' long) were not properly stored and identified outside east battery room, Aux. Bldg. 781', and cable 1HP05A was not properly stored in Control Bldg. 781', in accordance with Baldwin Associates Storage and Maintenance Procedure BAP 2.2.4, Paragraph 5.2.2 and Cable Installation Procedure BAP 3.3.2, Paragraph 5.5.1.d.

7. 10 CFR 50, Appendix B, Criterion XIII states, in part, "Measures shall be established to control the handling, storage, shipping, cleaning and preservation of material and equipment in accordance with work and inspection instructions to prevent damage or deterioration."

Baldwin Associates Storage and Maintenance Procedure BAP 2.4, Paragraph 6.2.2, states "Quality Control shall verify storage conditions at the intervals specified on the SMIR (Storage and Maintenance Instructions and Record) and shall initial the SMIR when items and materials are stored in accordance with the SMIR and Sections 5.1/5.2 of this procedure." SMIR for motor-operated valves specifies that storage conditions shall be verified monthly.

Contrary to the above, as of January 22, 1982, Quality Control had not verified the storage conditions at the monthly interval specified on the SMIR since September 29, 1981 for motor-operated valves 1E12-F037A, 1E12-037B, 1E12-F040, 1E12-F042A, 1E12-F042C, 1E12-F047B, 1E12-F048A, 1E12-F048B, and 1E12-F049.

8. 10 CFR 50, Appendix B, Criterion XV states, in part, "Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation."

The Clinton Power Station QA Manual, Chapter 15, Paragraphs B.2 and B.4 states, "Nonconforming items shall be clearly identified. Measures shall be established which control further use or installation of nonconforming items pending disposition."

Contrary to the above, the licensee failed to document the following known nonconforming conditions on a Nonconformance Report or a Deviation Report as of January 14, 1982:

a. Baldwin Associates Interoffice Memorandum QCE-81-043, dated November 5, 1981, states, in part, "The following listed items are discrepancies found during the reinspection that should have been identified during the original inspection.

(1) Tray connections bought off by QC inspectors do not reflect the accurate configuration.

(2) The revising of Raceway Packages by Engineering to delete tray sections with discrepancies have not been addressed in a subsequent package, (also see Corrective Action Request, CAR-079).

(3) Unknown connections of tray to hanger, i.e., the connection detail used cannot be verified against approved details specified in the E05 drawings.

(4) Tray spotwelds (manufacturers) were not galvanized (showing evidence of rust).

(5) Technical Services signed off 'no weld' on connections where welds were made.

(6) Weld burn through in trays.

(7) Broken spotwelds in tray, especially at field cuts.

(8) Sharp edges on tray not removed or covered by protective edging.

(9) Z clips not attached to tray (not making physical contact).

(10) Identification numbers hidden, located at the wrong place and damaged."

b. Illinois Power Company QA Surveillance Finding No. C-181, dated December 11, 1981 documents that incorrect attachments were used for raceway-to-hanger connections identified in Raceway Inspection Release Travelers No. R-T-087 and No. R-T-090. This involved 14 raceways and 10 hangers.

c. Baldwin Associates QC inspectors identified seven items of noncompliance on QC Raceway Installation Inspection Checklist, Release No. R-T-004, R/2, dated December 24, 1981. This was a reinspection of the subject release number.

d. Baldwin Associates QC inspectors identified on General Inspection Report IR No. R-T-001, dated December 29, 1981, that the cable tray hanger connection details for hangers H-12 through H-22 should be DV-48A and DV-9 per Field Change Request (FCR) No. 5247, approved June 25, 1980. Details DV-48A and DV-9 were used, plus details AB-213 and AB-214 which were not authorized. This was a reinspection of the subject release.

e. Illinois Power Company QA Surveillance finding No. C-185, dated January 6, 1982, documents the fact that 11 Class 1E cables were pulled (utilizing three mechanical tuggers and only one tensiometer), without verifying that maximum cable pulling tension had not been violated. An NCR or DR had not been prepared as of the time of the NRC investigation on February 19, 1982.

f. On or about December 22, 1981, Baldwin Associates QC management discharged a QC inspector who had apparently falsified one or more inspection reports by signing off on reports without making the required inspections. All of the inspections performed by the QC inspector were thereby made unacceptable or indeterminate. Although some reverification had been initiated, no NCR or DR had been issued regarding this matter by the time of an NRC investigation on January 12, 1982. Corrective Action Request (CAR) No. 078 was not prepared to document these circumstances until January 19, 1982.

g. Baldwin Associates Construction and Subcontracts supervision were aware of but did not document on an NCR or DR the fact that the fire protection piping being installed on the south cable spreading room did not meet the separation criteria for Class 1E raceway and piping per the requirements of the Electrical Specifications, K2999, Paragraph 903.1.f.

h. During a cable pull on January 6, 1982, Baldwin Associates Construction violated a Stop Work Order issued by a BA QC inspector. IP QA and BA QC supervision were aware that the Stop Work Order had been violated. As of February 2, 1982, neither an NCR nor a DR were prepared.

i. The NRC identified 19 Nonconformance Reports that were improperly voided between July 31, 1981 and January 15, 1982. Examples are:

(1) Nonconformance Report (NCR) No. 4925, dated July 13, 1981, was prepared to document that the cross bracing

between hangers H8A and H7A could not be reinstalled due to interference of hanger E28-1000-03A-CC18.

Field Change Request No. 10605 was issued on August 7, 1981, to resolve the problem identified on the NCR. On October 7, 1981, the NCR was improperly voided in that the reason given for voiding the NCR was that FCR 10605 had been issued to resolve the problem.

By voiding the NCR, the tracking system to verify that the cross bracing was installed is negated and is removed from the trend analysis system.

(2) Nonconformance Report No. 5326, dated September 1, 1981, was prepared to document that auxiliary steel AS-14 and hanger CC-9 were installed to drawing E26-1617-EIH, Revision A, and that Revision B to this drawing created hanger CC-41 and deleted AS-14 and CC-9.

The recommended disposition, as approved through IP Supervisor of Construction on September 10, 1981, was to use the existing AS-14 and CC-9 and to revise the applicable drawings to delete CC-41 and reinstitute AS-14 and CC-9. (Revert back to the Revision A condition.)

The NCR was voided because Revision B deleted the hanger. Revision B to the subject drawing was the reason the NCR was prepared.

By voiding the NCR, the tracking system to verify that the drawing was changed to reflect the Revision A conditions or, depending on the engineer's disposition, that auxiliary steel AS-14 and hanger CC-9 were removed and hanger CC-41 installed, has been negated. Also, the voided NCR is removed from the trend analysis system.

(3) Nonconformance Report No. 5368, dated September 12, 1981, was prepared to document that the raceway was not grounded between routing points 10510 and 16423, which is a distance of 80'. Electrical Specification K2999 requires grounding at 60' maximum intervals.

The NCR was voided on October 3, 1981, because the Baldwin Associates Procedures do not establish criteria for grounding on Class 1E tray.

The approved drawings, specifications, codes, standards, and regulatory requirement establish criteria, not BA procedures. By voiding the NCR, the tracking system to verify that the grounding was installed per the specification requirements has been negated and the NCR would be removed from the trend analysis system.

j. A Hold Tag applied by a BA QC inspector to a nonconforming cable (Ref. NCR6088) was improperly removed by the BA QC field supervisor so that termination of cables 1AP36F and 1AP36M could proceed. The Hold Tag was removed on or about January 7, 1982, without an approved disposition on the Nonconformance Report.

9. 10 CFR 50, Appendix B, Criterion XVI states, in part, "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations...are promptly identified and corrected. The identification of the significant condition adverse to quality, the cause of the condition...shall be documented and reported...."

Baldwin Associates Procedure BAP 1.0, "Nonconformances," Paragraph 4.1 states, in part, "Project Personnel have the responsibility to identify nonconforming conditions and report the conditions to Baldwin Associates...personnel who will initiate the proper paperwork to report the nonconformance." Paragraph 5.6 states, in part, "All necessary supporting documentation...shall be attached...and become part of the record file on the NCR."

Contrary to the above, measures did not assure that conditions adverse to quality were promptly identified and corrected, and that all supporting documentation was attached to and became part of the record file on the NCR. For example:

a. Nonconformance Report No. NCR 6093, dated January 6, 1982, and Corrective Action Request CAR 080, dated January 29, 1982, were issued to document that welding had been performed by an unqualified welder.

The licensee and contractor failed to disclose that the welder failed his "after-the-fact" welding qualification test and that he required additional training before he could pass the qualification test. This type of information is required to assist the engineer in resolving the nonconformance report.

b. On January 13, 1982, NRC inspectors identified to an IP QA engineer and BA QC inspector that two installed electrical penetrations, IEE18E and IEE23E, had lost their inert gas pressure. As of January 22, 1982, the subject penetrations had not been repressurized nor had an NCR/DR been prepared to document the condition and to assure followup.

c. Nonconformance Report NCR 3500, dated July 31, 1980, was prepared to document that 30 electrical hangers had welding performed on them after the final QC inspection had been completed. The additional welding resulted in two or more types of attachments being used on the same connection. (Example - Latest drawing revision indicates that Attachment DV-48A or DV-9 is to be installed. Actual installation indicates that all or part of Attachments DV-9, AB-213, and AB-214 were used).

An approved disposition was received on September 30, 1980, and as of January 22, 1982, NCR 3500 was still open. The longer the NCR remains open, the more safety related cables will be installed in the surrounding cable trays which will result in a larger probability that one or more cables will be damaged while completing the approved disposition on the NCR.

10. 10 CFR 50, Appendix B, Criterion XVIII states, in part, "A comprehensive system of planned and periodic audits shall be carried out...to determine the effectiveness of the program."

ANSI N45.2.12, Paragraph 3.5.1 states, "Auditing shall be initiated as early in life of the activity as practicable, consistent with the schedule for accomplishing the activity, to assure timely implementation of quality assurance requirements."

The Clinton Power Station QA Manual, Chapter 18, Section D, states, in part, "Baldwin Associates shall institute an audit program assuring that activities associated with construction and installation effort are in compliance with the Baldwin Associates quality assurance program and this manual."

Contrary to the above, Illinois Power QA and Baldwin Associates QA have not performed an audit or surveillance of the new Deviation Reports System, BAP 1.0.1, which was implemented on September 15, 1981 to assure timely implementation of quality assurance requirements and to determine the effectiveness of the new procedure.

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

(Civil Penalty - $50,000)

Pursuant to the provisions of 10 CFR 2.201, Illinois Power Company 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 III, 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, Illinois Power Company may pay the civil penalties in the cumulative amount of Ninety Thousand Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should Illinois Power Company fail to answer within the time specified, this office will issue an Order imposing the civil penalties in the amount proposed above. Should Illinois Power Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer may: (1) deny the violations listed in this Notice in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties. 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., giving page and paragraph numbers) to avoid repetition. Illinois Power Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Upon failure to pay 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

James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 5th day of October 1982

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

DEC 3 0 1981

Docket Nos. 50-315
50-316
EA 82-03

American Electric Power Service
Corporation
Indiana and Michigan Power Company
ATTN: Mr. John E. Dolan, Vice Chairman,
Engineering
2 Broadway
New York, NY 10004

Gentlemen:

This refers to the routine safety inspections conducted at the Donald C. Cook Nuclear Plant, Units 1 and 2, during the period June 1 through August 13, 1981. The results of these inspections indicate, among other things, serious weaknesses in the management of your fire protection program and conduct of containment leakage tests as evidenced by the significant number of violations of NRC regulatory requirements. Our concerns deal with three principal areas; (1) inadequate implementation of the fire protection program including failure to implement the inservice testing requirements for a number of systems; (2) material false statements; and (3) failure to maintain containment integrity.

In regard to the first concern, numerous instances were identified wherein timely tests and inspections were not conducted to assure acceptable performance of fire protection components. For example, timely tests and inspections were not performed on spray and sprinkler systems and on fire detection supervisory circuits to assure that they were operable and on fire doors in fire barriers to verify that they were functional. This is a matter of special concern in that your failure to perform timely tests and make the necessary inspections posed questions as to the operability of the spray and sprinkler systems and the fire detection supervisory circuits and whether the fire doors in the fire barriers were functional.

In regard to the second concern, material false statements, the NRC staff, during a review of your fire protection program, sent four letters to you requesting specific information. In response to these letters it was stated that various zones and areas were equipped with 1½-hour and 3-hour rated fire doors and administrative measures had been established to control storage of combustible materials in the vicinity of safety related systems. However, the zones and areas were not equipped with the appropriately rated fire doors and there were no procedures to control the storage of combustible materials in the vicinity of safety related systems. In May 1978, the Indiana and Michigan Power Company was cited and civil penalties were proposed for material false statements with respect to the testing of electrical penetrations and instrument cable.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Your response, dated June 15, 1978, to the NRC Notice of Violation described corrective actions to assure the unerring accuracy of submittals to the NRC. Your corrective actions were found to be acceptable. The material false statements cited in Appendix A to this letter occurred prior to the material false statements for which you previously were cited. Inaccurate information could result in decisions which adversely affect the health and safety of the public. Therefore, it is imperative that licensees exercise the utmost care in verifying the information furnished the NRC.

The third area of concern involves an incident in which containment integrity was not maintained while the facility was in hot standby and hot shutdown. For a period of approximately 60 hours containment integrity was breached in that a containment sensing line plug which was removed to install a test instrument was not replaced following completion of an Integrated Leak Rate Test. While the incident had limited safety significance, we are concerned about the inadequacy of your test control procedures which failed to assure that the technician used the correct point to test the system and restore the system following completion of the test. Although you did subsequently identify the containment breach, you failed to notify or report the incident to the Commission on a timely basis. Similar events involving failure to assure the operability of safety systems following surveillance testing or maintenance were discussed with you during an enforcement conference on January 13, 1981.

The safety significance of the above matters together with other items of non-compliance discovered during the inspections were discussed on August 4, 1981, during an enforcement conference in the Region III office between you and members of your staff and Mr. J. G. Keppler and others of the NRC staff.

Accordingly, in order to emphasize the importance the NRC places on adequate management control and followup on matters such as these, we propose to impose civil penalties in the cumulative amount of Eighty Thousand Dollars for the items set forth in Appendix A to this letter. These violations occurred under both the old and new enforcement policies. Those violations that occurred under the old policy have been evaluated using factors identified in the "Criteria for Determining Enforcement Action," which was sent to NRC licensees on December 31, 1974. Those violations that encompassed both the old and new policies or occurred completely under the new policy have been categorized at the level described in accordance with the Interim Enforcement Policy published in the Federal Register 45 FR 66754 (October 7, 1980). The base value for Severity Level III Violations, such as the fire protection program violation or the containment integrity violation, is normally $40,000. Because you could have reasonably been expected to have implemented measures to avoid the containment integrity violation following our enforcement conference on January 13, 1981, an increase in the base value to $50,000 is appropriate. However, after considering all the circumstances of this violation including your self-identification, we are reducing the adjusted amount ($50,000) of the civil penalty to $40,000.

The inspections also identified certain safety significant activities which deviate from commitments to the NRC and from applicable codes approved by the NRC. The deviation is identified in the Notice of Deviation enclosed herewith as Appendix B and is an additional example of the breakdown in the management of your fire protection program.

You are required to respond to this letter and should follow the instructions in Appendices A and B when preparing your response. Additionally, please provide an explanation as to the extent of management involvement in the material false statements cited in Appendix A. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action may be appropriate.

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

The responses directed by this letter and the enclosed Appendices 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,

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosures:
1. Appendix A - Notice of Violation and
   Proposed Imposition of Civil Penalties
2. Appendix B - Notice of Deviation

cc w/encls:
D. V. Shaller, Plant Manager

APPENDIX A

NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

American Electric Power Service Corporation
Indiana and Michigan Power Company
Donald C. Cook Nuclear Plant, Units 1 and 2

Docket Nos. 50-315
50-316

EA 82-03

As a result of inspections conducted during the period June 1 through August 13, 1981, at the Donald C. Cook Nuclear Plant near Bridgman, Michigan, it appears that breakdowns have occurred in the control of your licensed activities. Numerous violations demonstrate that the licensee failed to adequately implement its fire protection program. The inservice testing program for various fire protection systems was not implemented, certain tests and inspections were not conducted on a timely basis and the accuracy of information provided to the Commission regarding the fire protection program was not assured. Also, adequate control over surveillance testing procedures to assure that such testing did not affect the operability of systems important to safety was not maintained. Consequently, the performance of a leak rate test resulted in a breach of containment integrity for approximately 60 hours. This failure to ensure operability of safety systems following surveillance testing had been previously identified to the licensee.

Because of these breakdowns in implementation of and control of licensed activities, the Nuclear Regulatory Commission proposes to impose civil penalties in the amount of $80,000 for these matters.

Items I.A., I.B., I.D., I.E., I.F., II.A, II.B, III.A., III.B., and III.C have been categorized at the level described in accordance with the Interim Enforcement Policy 45 FR 66754 (October 7, 1980). In categorizing Items I.C., I.G., I.H., and I.I., the factors identified in the "Criteria for Determining Enforcement Action," which was sent to NRC licensees on December 31, 1974, have been taken into account. These penalties are proposed pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), and 10 CFR 2.205.

CIVIL PENALTY VIOLATIONS

I. A number of violations involving the implementation of your fire protection program were identified. The total of the proposed civil penalties for this failure to properly implement your fire protection program is $40,000.

   A. Technical Specification 3.7.10 for Units 1 and 2 requires that all penetration fire barriers protecting safety related areas shall be functional at all times. With one or more of the above required penetration fire barriers non-functional, a continuous fire watch shall be established within one hour.

Technical Specification 4.7.10 for Units 1 and 2 states, in part, "Each of the above required penetration fire barriers shall be verified to be functional by a visual inspection...at least once per 18 months..."

Contrary to the above:

1. As of June 4, 1981, the licensee had not verified by visual inspection that certain penetration fire barriers [fire doors and fire dampers] protecting safety related areas were functional since the requirement became effective on January 12, 1978, for Unit 1 and on December 23, 1977, for Unit 2.

2. Eighteen fire doors protecting safety related areas (including the auxiliary feedwater pump rooms and containment cabling and piping penetration areas) were not functional for the following reasons:

   a. Sixteen doors did not have the required fire rating.

   b. Two fire doors were obstructed from closing.

   c. Six fire doors had inoperable closure and/or latching mechanisms.

3. On June 4, 1981, when the NRC inspector informed licensee management that the visual inspections were overdue, the licensee failed to implement the provisions of the action statement of Technical Specification 3.7.10 and thereby satisfy the limiting condition for operation.

This is a Severity Level III violation (Supplement 1). (Civil Penalty - $10,000).

B. Technical Specifications 3.3.3.7 for Unit 1 and 3.3.3.8 for Unit 2 state, in part, "As a minimum, the fire detection instrumentation for each fire detection zone...shall be OPERABLE...With the number of OPERABLE fire detection instruments less than required...Within one hour, establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour..."

Technical Specifications 4.3.3.7.2 for Unit 1 and 4.3.3.8.2 for Unit 2 state, "The NFPA Code 72D Class B supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per six months."

Contrary to the above:

1. As of June 3, 1981, the fire detector supervisory circuits had not been demonstrated OPERABLE since the requirements became effective on January 12, 1978, for Unit 1, and on December 23, 1977, for Unit 2.

2. Four fire detector supervisory circuits were not OPERABLE due to malfunctioning relays. This resulted in a degraded mode of operation for the fire detection instrumentation for those four zones.

3. On June 4, 1981, when the NRC inspector informed licensee management that the OPERABILITY demonstrations were overdue, the licensee failed to implement the provisions of the action statement of Technical Specification 3.3.3.7 for unit 1 and 3.3.3.8 for Unit 2 and thereby satisfy the limiting condition for operation.

This is a Severity Level III violation (Supplement I).
(Civil Penalty - $5,000).

C. Technical Specification 3.7.9.2 for Units 1 and 2 states, in part, "The spray and/or sprinkler systems located in the areas shown in Table 3.7-5 shall be OPERABLE...Whenever equipment in the spray/sprinkler protected areas is required to be OPERABLE...with one or more of the above required spray and/or sprinkler systems inoperable, establish a continuous fire watch with backup fire suppression equipment for the unprotected area(s), within one hour..."

Technical Specification 4.7.9.2 for Units 1 and 2 states, in part, that each of the above required spray and/or sprinkler systems shall be demonstrated to be OPERABLE at intervals of 12 months and 18 months, in accordance with specified test requirements.

Contrary to the above, until January 3, 1980, the spray and sprinkler systems listed in Technical Specification Table 3.7-5 had not been demonstrated OPERABLE since the requirement became effective on January 12, 1978, for Unit 1 and on December 23, 1977, for Unit 2.

This is an Infraction.
(Civil Penalty - $4,000).

D. Technical Specification 3.7.9.1 for Units 1 and 2 requires that the fire suppression water system shall be OPERABLE with two high pressure pumps. With the fire suppression water system otherwise inoperable a backup fire suppression water system shall be established within 24 hours.

Technical Specification 4.7.9.1.1 states, in part, "The fire suppression water system shall be demonstrated OPERABLE...At least once per 18 months by performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence, and...Verifying that each high pressure pump starts (sequentially) to maintain the fire suppression water system pressure $\geq$ 100 psig..."

Contrary to the above, the fire suppression water system was due for testing on November 5, 1980, but was not tested until April 7, 1981.

This is a Severity Level IV violation (Supplement I). (Civil Penalty - $4,000).

E. 10 CFR 50, Appendix B, Criterion V requires that activities affecting quality shall be prescribed by documented procedures and shall be accomplished in accordance with these procedures. Procedures shall include appropriate quantitative or qualitative acceptance criteria. Plant Manager Instruction, PMI 2010, "Plant Manager and Department Head Instructions, Procedures and Associated Indexes," implements these requirements of 10 CFR 50, Appendix B, Criterion V. PMI 2010 states, in part, "Acceptance criteria shall include the specific requirements that must be obtained before a Procedure can be considered as having been properly completed."

Contrary to the above, Operations Head Procedure 1-OHP 4030.STP.120, Data/Signoff Sheet 6.5, "Auxiliary Building Water/CO_2 Flow Path Verification," did not include acceptance criteria for determining the proper completion of the procedure employed for testing of fire protection system components. Consequently, the procedure was approved as being satisfactorily completed on February 27, 1981, when the test data showed pressures that were far in excess of the system capability during a flow obstruction test.

This is a Severity Level IV violation (Supplement I). (Civil Penalty - $2,500).

F. Technical Specification 6.8.1.e for Units 1 and 2 requires that written procedures shall be established, implemented and maintained covering the Emergency Plan implementation.

The Donald C. Cook Emergency Plan which is contained in Section 12.3.1 of the Final Safety Analysis Report was amended in December 1977 (Amendment No. 80) to include a requirement in Part IX.F.4 that fire brigade members participate in quarterly fire drills.

Contrary to the above, written procedures were not established to implement this requirement. Consequently, the requirement was not satisfied on four occasions as follows:

1. The Operating Shift A Fire Brigade did not participate in a fire drill in the second quarter of 1979.

2. The Operating Shift C Fire Brigade did not participate in a fire drill in the third quarter of 1979.

3. The Operating Shift B Fire Brigade did not participate in a fire drill in the third quarter of 1980.

4. The Operating Shift D Fire Brigade did not participate in a fire drill in the fourth quarter of 1980.

This is a Severity Level IV violation (Supplement I). (Civil Penalty - $2,500).

G. As part of the NRC staff review of fire protection at the D. C. Cook Nuclear Plant, Units 1 and 2, the staff requested, by letter dated September 30, 1976, that the licensee prepare a fire hazards analysis of the facility. The licensee's response dated March 31, 1977, "Fire Hazards Analysis Units 1 and 2," stated that ten specified fire zones were provided with 12 (Underwriter's Laboratories approved) Class B doors.

Contrary to section 186 of the Atomic Energy Act of 1954, the statement in the licensee's March 31, 1977 response is a material false statement. It is false in that none of the 12 specified doors had any fire resistance rating. This false statement is material in that the staff relied upon it in reaching its conclusions regarding the acceptability of the licensee's fire protection program.

(Civil Penalty - $4,000).

H. The NRC staff requested by letter dated July 11, 1977, that the licensee provide information concerning unprotected openings in the auxiliary feedwater pump rooms. The licensee's response dated November 22, 1977, stated, in part, "The four feedwater pump rooms are equipped with [Underwriter's Laboratories approved] three hour rated fire doors..."

Contrary to section 186 of the Atomic Energy Act of 1954, the statement in the licensee's November 22, 1977 response is a material false statement. It is false in that it was determined that none of these doors had a fire resistance rating. This false statement is material in that the staff relied upon it in reaching its conclusions regarding the acceptability of the licensee's fire protection program.

(Civil Penalty - $4,000).

I. The NRC staff requested by letters dated July 16 and 30, 1976, that the licensee make a comparison of the D. C. Cook Nuclear Plant fire protection program with the positions in Appendix A to Branch Technical Position APCSB 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976." One of the positions in Appendix A states, in part, "Effective administrative measures should be implemented to prohibit bulk storage of combustible materials inside or adjacent to safety related buildings or systems during operation or maintenance periods ..." The licensee's response dated January 31, 1977, stated, in part, "Administrative measures have been established to control the storage of combustible materials and to prohibit their storage in the vicinity of safety related systems."

Contrary to section 186 of the Atomic Energy Act of 1954, the statement in the licensee's January 31, 1977 response is a material false statement. It is false in that it was determined during an NRC inspection that administrative measures had not been established at the time of the licensee's January 31, 1977 response and they were not established until July 28, 1977. This false statement is material in that the staff relied upon it in reaching its conclusions regarding the acceptability of the licensee's fire protection program.

(Civil Penalty - $4,000).

II. The following violations relate to the degradation of containment integrity and failure to make a timely notification of the event. The total of the proposed civil penalties for these violations is $40,000.

A. Technical Specification 3.6.1.1 requires that primary containment integrity be maintained during power operation, startup, hot standby and hot shutdown (modes 1, 2, 3 and 4). If primary containment integrity is lost, it is required to be restored within one hour or the plant be placed in at least hot standby within the next six hours and in cold shutdown within the following 30 hours.

Contrary to the above, primary containment integrity was not maintained from about 10:45 a.m. on May 10, 1981, to 10:30 p.m. on May 12, 1981, (a period of about 60 hours) while the Unit 2 reactor was in hot standby and hot shutdown (modes 3 and 4) in that a containment sensing line plug, removed to install a test instrument, was not replaced following completion of the Integrated Leak Rate Test. The calculated leakage rate from the sensing line with the plug removed exceeded the limits allowed by Technical Specification.

This is a Severity Level III violation (Supplement I).
(Civil Penalty - $30,000).

B. Technical Specification 6.9.1.8 requires that NRC be notified of certain events within 24 hours by telephone and with a written followup report within 14 days. One event that requires reporting withing 24 hours is: "Personnel error or procedural inadequacy which prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR."

10 CFR 50.72 requires the notification of the NRC Operations Center as soon as possible and in all cases within one hour by telephone of the occurrence of "Personnel error or procedural inadequacy which, during normal operations, anticipated operational occurrences, or accident conditions, prevents or could prevent, by itself, the fulfillment of the safety function of those structures, systems, and components important to safety that are needed to (i) shut down the reactor safely and maintain it in a safe shutdown condition, or (ii) remove residual heat following reactor shutdown, or (iii) limit the release of radioactive material to acceptable levels or reduce the potential for such release."

Contrary to the above, telephone notification was not made of the event described above in Item II.A and a written report was not submitted within 14 days. The event was identified by the licensee on May 12, 1981, but was not reported to the NRC until July 15, 1981.

This is a Severity Level III violation (Supplement I). (Civil Penalty - $10,000).

III. VIOLATIONS NOT ASSESSED A CIVIL PENALTY

A. 10 CFR 50, Appendix B, Criteria III and XVII require, respectively, that:

"Design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design."

"Sufficient records shall be maintained to furnish evidence of activities affecting quality."

Contrary to the above, a 1/2 inch valve and associated section of piping on Unit 1 containment penetration CPN-30 was not subjected to design control measures commensurate with those applied to the original design. In addition, no records were maintained to furnish evidence of activities affecting quality.

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

B. Technical Specification 6.5.1.6 requires that the Plant Nuclear Safety Review Committee (PNSRC) be responsible for review of all procedures required by Technical Specification 6.8 and changes thereto. Technical Specification 6.8 includes requirements to have surveillance test procedures.

Contrary to the above, surveillance test Procedure 12THP4030 STP.202, Revision 3, was changed in that the isolation valves for containment pressure transmitters PPA-310 and PPA-311, which were not addressed in the procedure, were closed during the Integrated Leak Rate Test without review by the PNSRC.

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

C. 10 CFR 50, Appendix J, requires that Type C tests be performed during each reactor shutdown for refueling but in no case at intervals greater than two years.

Contrary to the above, the valve installation described in Item B above, which was installed prior to the last shutdown for refueling had not been Type C leak tested.

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

Pursuant to the provisions of 10 CFR 2.201, American Electric Power Service Corporation is hereby required to submit to this office within thirty days of the date of this Notice a written statement or explanation, including for each alleged violation; (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the Authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, American Electric Power Service Corporation may pay the civil penalties in the cumulative amount of Eighty Thousand Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should American Electric Power Service Corporation fail to answer within the time specified, this office will issue an Order imposing the civil penalties in the amount proposed above. Should American Electric Power Service Corporation elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer may: (1) deny the violations listed in 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., giving page and paragraph numbers) to avoid repetition. American Electric Power Service Corporation'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 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

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 30th day of December, 1981.

Appendix B

NOTICE OF DEVIATION

American Electric Power Service Corporation
Indiana and Michigan Power Company

Docket Nos. 50-315
50-316

EA 82-03

Based on the results of the NRC inspection conducted on June 1-4 and August 13, 1981, one of your activities appears to deviate from your commitment to the Commission and has safety significance as indicated below:

"Donald C. Cook Nuclear Plant Response to Appendix A to Branch Technical Position APCSB 9.5-1 for Units 1 and 2," submitted to the NRC on January 31, 1977, Section II.D.1.j states, in part, "All doors...[Enclosing separated fire areas]...carry UL Class A (three hour) fire rating."

"Donald C. Cook Nuclear Plant Fire Hazards Analysis," submitted to the NRC on March 31, 1977, describes the fire protection measures which are taken in all areas of the plant. Concerning the method of fire containment for the Unit 1 and Unit 2 Diesel Fire Pump Rooms, the "Fire Hazards Analysis" states, "Walls, floor, ceiling; all reinforced concrete and in excess of 3 hour rating. Class A (3 hour) door, no dampers."

Contrary to the above, at the time of this inspection, the Unit 1 and Unit 2 Diesel Fire Pump Rooms fire doors did not maintain their Underwriter's Laboratories Class A (three hour) fire rating due to inoperable latching mechanisms.

Provide this office within thirty days of the date of this Notice written comments including a description of corrective actions that have been or will be taken, corrective actions which will be taken to avoid further deviations, and the date your corrective actions will be completed.

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

Docket Nos. 50-315
50-316
Licenses Nos. DPR-45
DPR-74
EA 82-03

OCT 14 1982

Indiana and Michigan Electric Company
ATTN: Mr. John E. Dolan
Vice President
Post Office Box 18
Bowling Green Station
New York, NY 10004

Gentlemen:

This will acknowledge receipt of your letter dated March 1, 1982 in response to the Notice of Violation and Proposed Imposition of Civil Penalties sent to you with our letter dated December 30, 1981. Our December 30, 1981 letter concerned violations found during routine safety inspections conducted at the Donald C. Cook Nuclear Plant, Units 1 and 2, during the period June 1 through August 13, 1981.

After careful consideration of your response, and for the reasons given in the enclosed Order and Appendix, we have concluded that with the exception of Items I.A, I.B, and I.F, the violations did occur as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties. The proposed civil penalties for Items I.A, I.B, I.C, I.D, I.E, and I.F were based upon serious weaknesses in the management of your fire protection program. Items I.A and I.B addressed the operability of fire doors and fire detection instrumentation. After consideration of your response to Items I.A and I.B, including proposed corrective actions, Item I.A has been withdrawn and Items I.B and I.F have been revised. Therefore, in view of the comparatively minor significance of the remaining items and in accordance with the NRC Enforcement Policy, the proposed civil penalties for Items I.A through I.F are withdrawn. While the citation for the deficiencies identified in Item I.A has been withdrawn, this item does represent an inadequacy in the implementation of the fire protection program at the Donald C. Cook Nuclear Plant, Units 1 and 2. Your proposed corrective action for this item as well as the other violations will continue to be monitored during subsequent inspections.

No adequate reasons have been provided for not imposing the proposed civil penalties for the remaining violations. Accordingly, we hereby serve the enclosed Order on Indiana and Michigan Electric Company, imposing civil penalties in the amount of Fifty Two Thousand Dollars.

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,

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosures:
1. Order Imposing Civil Monetary Penalties
2. Appendix - Evaluation and Conclusions

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Indiana and Michigan Electric Company	)	Docket Nos. 50-315
Donald C. Cook Nuclear Plant	)	50-316
Units 1 and 2	)	Licenses No. DPR-45
	)	DPR-74
	)	EA 82-03

ORDER IMPOSING CIVIL MONETARY PENALTIES

I

Indiana and Michigan Electric Company (the "licensee") is the holder of Operating Licenses No. DPR-45 and No. DPR-74 (the "licenses") issued by the Nuclear Regulatory Commission (the "Commission"). These licenses authorize the operation of Units 1 and 2 of the Donald C. Cook Nuclear Plant near Bridgman, Michigan. These licenses were issued on October 25, 1974 and December 23, 1977.

II

As a result of inspections of the licensee's facilities by the Nuclear Regulatory Commission's Office of Inspection and Enforcement during the period June 1 through August 13, 1981, the NRC staff determined that in several instances the licensee failed to adequately implement its fire protection program. In addition, the performance of a leak rate test resulted in a breach of containment integrity for approximately 60 hours. The NRC served the licensee a written Notice of Violation and Notice of Proposed Imposition of Civil Penalties by letter dated December 30, 1981. The Notice stated the nature of the violations, the provisions of the Atomic Energy Act, the Nuclear Regulatory Commission's

regulations or license conditions that were violated, and the amount of the civil penalty proposed for each violation. The licensee responded to the Notice of Violation and Notice of Proposed Imposition of Civil Penalties with a letter dated March 1, 1982.

III

Upon consideration of Indiana and Michigan Electric Company's response (March 1, 1982) and the statements of fact, explanation, and argument in denial or mitigation contained therein as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined that, with the exception of Items I.A, I.B, and I.F, the violations did occur as set forth in the Notice of Violation. The proposed civil penalties for Items I.A, I.B, I.C, I.D, I.E, and I.F were based upon serious weaknesses in the management of the fire protection program. Items I.A and I.B addressed the operability of fire doors and fire detection instrumentation. After consideration of the licensee's response to Items I.A and I.B, including proposed corrective actions, Item I.A has been withdrawn and Items I.B and I.F have been revised. Therefore, in view of the significance of the remaining items and in accordance with the NRC Enforcement Policy, the proposed civil penalties for Items I.A through I.F are withdrawn. However, the status of civil penalties for all remaining violations designated in the Notice of Violation has not changed.

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 total amount of Fifty Two Thousand Dollars within thirty days of date of this Order, by check, draft, or money order payable to the Treasurer of the United States and mailed to the Director of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

V

The licensee may within thirty days of the date of this Order request a hearing. A request for a hearing shall be addressed to the Director, Office of Inspection and Enforcement. A copy of the hearing request shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555. If a hearing is requested, the Commission will issue an Order designating the time and place of hearing. Should the licensee fail 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 the Notice of Violation and Proposed Imposition of Civil Penalties referenced in Section II above, and

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

FOR THE NUCLEAR REGULATORY COMMISSION

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 14 day of October 1982

APPENDIX

EVALUATION AND CONCLUSIONS

Each item of noncompliance and associated civil penalty identified in the Notice of Violation (dated December 30, 1981), which was denied by the licensee, or for which mitigation was requested is restated below. The Office of Inspection and Enforcement's evaluation of the licensee's response is presented, followed by conclusions regarding the occurrence of the noncompliance and the proposed civil penalty.

Item I.A

STATEMENT OF NONCOMPLIANCE

Technical Specification 3.7.10 for Units 1 and 2 requires that all penetration fire barriers protecting safety related areas shall be functional at all times. With one or more of the above required penetration fire barriers non-functional, a continuous fire watch shall be established within one hour.

Technical Specification 4.7.10 for Units 1 and 2 states, in part, "Each of the above required penetration fire barriers shall be verified to be functional by a visual inspection...at least once per 18 months...."

Contrary to the above:

1. As of June 4, 1981, the licensee had not verified by visual inspection that certain penetration fire barriers (fire doors and fire dampers) protecting safety related areas were functional since the requirement became effective on January 12, 1978, for Unit 1 and on December 23, 1977, for Unit 2.

2. Eighteen fire doors protecting safety related areas (including the auxiliary feedwater pump rooms and containment cabling and piping penetration areas) were not functional for the following reasons:

   a. Sixteen doors did not have the required fire rating.

   b. Two fire doors were obstructed from closing.

   c. Six fire doors had inoperable closure and/or latching mechanisms.

3. On June 4, 1981, when the NRC inspector informed licensee management that the visual inspections were overdue, the licensee failed to implement the provisions of the action statement of Technical Specification 3.7.10 and thereby satisfy the limiting condition for operation.

This is a Severity Level III violation (Supplement I).
(Civil Penalty - $10,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee admitted that the facts are correct as stated in the Notice of Violation. The licensee contends that these facts do not represent a violation of Technical Specification 3/4.7.10 because the scope of that specification was narrowly interpreted by the licensee to include only piping and cabling penetration fire seals. The licensee provided a chronology of correspondence between the NRC staff and the licensee which preceded the issuance of Technical Specification 3/4.7.10 to support this position. Correspondence concerning the subject Technical Specification discusses only piping and cabling penetration seals. In response to this apparent violation, the licensee has committed to submit a request for a license amendment that would revise Technical Specification 3/4.7.10 to encompass all types of penetration fire barriers including fire doors and fire dampers, and pending that amendment to administratively apply Technical Specification 3/4.7.10 to these types of penetration fire barriers.

CONCLUSION

The information provided in the licensee's response does provide a basis for concluding that the scope of Technical Specification 3/4.7.10 could have been interpreted by the licensee to include only piping and cabling fire barrier penetration seals. Although the information in the licensee's response supports this interpretation, this interpretation represents poor fire protection engineering practice. The lack of any test or inspection program for fire doors resulted in undetected, nonfunctional fire doors which were intended to protect safety-related equipment. However, based on NRC's evaluation of the licensee's response, violation I.A will be retracted and the civil penalty for this violation will not be imposed.

Item I.B

STATEMENT OF NONCOMPLIANCE

Technical Specifications 3.3.3.7 for Unit 1 and 3.3.3.8 for Unit 2 state, in part, "As a minimum, the fire detection instrumentation for each fire detection zone... shall be OPERABLE.... With the number of OPERABLE fire detection instruments less than required.... Within one hour, establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour...."

Technical Specifications 4.3.3.7.2 for Unit 1 and 4.3.3.8.2 for Unit 2 state, "The NFPA Code 72D Class B supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per six months."

Contrary to the above:

1. As of June 3, 1981, the fire detector supervisory circuits had not been demonstrated OPERABLE since the requirements became effective on January 12, 1978, for Unit 1, and on December 23, 1977, for Unit 2.

2. Four fire detector supervisory circuits were not OPERABLE due to malfunctioning relays. This resulted in a degraded mode of operation for the fire detection instrumentation for those four zones.

3. On June 4, 1981, when the NRC inspector informed licensee management that the OPERABILITY demonstrations were overdue, the licensee failed to implement the provisions of the action statement of Technical Specification 3.3.3.7 for Unit 1 and 3.3.3.8 for Unit 2 and thereby satisfy the limiting condition for operation.

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

(Civil Penalty - $5,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee admitted that the facts are correct as stated in the Notice of Violation. The licensee's response to violation I.B has provided no new information regarding the circumstances surrounding this violation, but has focused on the definition of fire detector "operability." The licensee contends that the fire detection instrumentation technical specification was not violated by having fire detection supervisory circuits inoperable. The fire detection instrumentation technical specification requires a minimum number of detectors to be operable in each detection zone. The inoperable supervisory circuits did not affect the ability of the detection instrumentation to function properly. Consequently, under the definition of operability, the supervisory circuitry is not necessary attendant equipment which must be able to perform its function for the detection instrumentation to perform its function.

CONCLUSION

The NRC Staff accepts the licensee's position. Sections 2 and 3 of this violation will be retracted and the Severity Level will be reduced from III to IV. Since violation I.A has been retracted in its entirety and the severity level of violation I.B has been reduced, the civil penalty for violation I.B will not be imposed.

Item I.C

STATEMENT OF NONCOMPLIANCE

Technical Specification 3.7.9.2 for Units 1 and 2 states, in part, the spray and/or sprinkler systems located in the areas shown in Table 3.7-5 shall be OPERABLE.... Whenever equipment in the spray/sprinkler protected areas is required to be OPERABLE...with one or more of the above required spray and/or sprinkler systems inoperable, establish a continuous fire watch with backup fire suppression equipment for the unprotected area(s), within one hour...."

Technical Specification 4.7.9.2 for Units 1 and 2 states, in part, that each of the above required spray and/or sprinkler systems shall be demonstrated to be OPERABLE at intervals of 12 months and 18 months, in accordance with specified test requirements.

Contrary to the above, until January 3, 1980, the spray and sprinkler systems listed in Technical Specification Table 3.7-5 had not been demonstrated OPERABLE since the requirement became effective on January 12, 1978, for Unit 1 and on December 23, 1977, for Unit 2.

This is an Infraction.
(Civil Penalty - $4,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee admitted that the facts are correct as stated in the Notice of Violation. The licensee has provided no new information regarding the basis for or circumstances surrounding this violation. The licensee stated the civil penalty should be retracted because the violation was identified by the licensee and corrective action was promptly initiated.

This violation was identified during an internal audit on December 3-6, 1979, and formally documented in a Corrective Action Request on January 3, 1980. Temporary procedure changes were not written to correct the violation until January 29, 1980, for the charcoal filter protection systems and February 2, 1980, for the auxiliary building protection systems. The surveillance testing of these systems was not completed until February 6, 1980 and March 3, 1980, respectively. The long time period before corrective action was taken (without compensatory and remedial action) is indicative of inadequate licensee management attention to this fire protection violation as well as inadequate management control over the fire protection equipment surveillance program.

CONCLUSION

The violation as described above did occur as originally stated. Since violation I.A has been retracted in its entirety and the severity level of violation I.B has been reduced, the civil penalty for violation I.C will not be imposed.

Item I.F

STATEMENT OF NONCOMPLIANCE

Technical Specification 6.8.1.e for Units 1 and 2 requires that written procedures shall be established, implemented and maintained covering the Emergency Plan imolementation.

The Donald C. Cook Emergency Plan which is contained in Section 12.3.1 of the Final Safety Analysis Report was amended in December 1977 (Amendment No. 80) to include a requirement in Part IX.F.4 that fire brigade members participate in quarterly fire drills.

Contrary to the above, written procedures were not established to implement this requirement. Consequently, the requirement was not satisfied on four occasions as follows:

1. The Operating Shift A Fire Brigade did not participate in a fire drill in the second quarter of 1979.

2. The Operating Shift C Fire Brigade did not participate in a fire drill in the third quarter of 1979.

3. The Operating Shift B Fire Brigade did not participate in a fire drill in the third quarter of 1980.

4. The Operating Shift D Fire Brigade did not participate in a fire drill in the fourth quarter of 1980.

This is a Severity Level IV violation (Supplement I).
(Civil Penalty - $2,500).

EVALUATION OF LICENSEE'S RESPONSE

The licensee's response to violation I.F has provided new information regarding the circumstances surrounding this violation. The licensee indicates that two of the apparently missed fire drills are documented in the operations logbook. The remaining two apparently missed fire drills cannot be documented. The licensee admits that no formal procedure to hold fire drills existed from December 1977 until January 1979. The licensee contends that after January 1979, an Operations Standing Order (OSO-24) on the subject of fire drills,

written by the Operations Superintendent, constituted a formal administrative plant procedure and satisfied the Technical Specification requirements. This standing order was implemented following an internal audit of the fire protection program which had previously identified this violation.

An Operations Standing Order does not constitute a formal procedure in content, documentation or review and approval as required by Technical Specification 6.8.1.e. The licensee has demonstrated that two of the apparently missed fire drills can be documented through the operations logbook. However, failure to have an appropriate procedure shows that licensee management implemented inadequate corrective action after an internal audit identified this violation two and one-half years before this inspection.

CONCLUSION

The NRC accepts the statements made in the licensee's response concerning documentation of two of the four apparently missed fire drills and retracts parts 1 and 4 of this violation. Since violation I.A has been retracted in its entirety and the severity level of violation I.B has been reduced, the civil penalty for the remainder of violation I.F will not be imposed.

Items I.G and I.H

STATEMENT OF NONCOMPLIANCE

I.G

As part of the NRC staff review of fire protection at the D. C. Cook Nuclear Plant, Units 1 and 2, the staff requested, by letter dated September 30, 1976, that the licensee prepare a fire hazards analysis of the facility. The licensee's response dated March 31, 1977, "Fire Hazards Analysis Units 1 and 2," stated that ten specified fire zones were provided with 12 (Underwriters' Laboratories approved) Class B doors.

Contrary to section 186 of the Atomic Energy Act of 1954, the statement in the licensee's March 31, 1977 response is a material false statement. It is false in that none of the 12 specified doors had any fire resistance rating. This false statement is material, in that the staff relied upon it in reaching its conclusions regarding the acceptability of the licensee's fire protection program.

(Civil Penalty - $4,000)

I.H

The NRC staff requested by letter dated July 11, 1977, that the licensee provide information concerning unprotected openings in the auxiliary feedwater pump rooms. The licensee's response dated November 22, 1977, stated, in part, "The four feedwater pump rooms are equipped with (Underwriter's Laboratories approved) three hour rated fire doors...."

Contrary to section 186 of the Atomic Energy Act of 1954, the statement in the licensee's November 22, 1977 response is a material false statement. It is false, in that it was determined that none of these doors had a fire resistance rating. This false statement is material, in that the staff relied upon it in reaching its conclusions regarding the acceptability of the licensee's fire protection program.

(Civil Penalty - $4,000)

EVALUATION OF LICENSEE RESPONSE

The licensee admitted that the facts are generally correct as stated in the Notice of Violation. The licensee's response to violations I.G and I.H has provided no new information regarding the basis for or the circumstances surrounding these violations. The licensee's basis for mitigation of the civil penalty has also provided no new information regarding the criteria for imposition of a civil penalty for these violations. The licensee asserts that a civil penalty is not appropriate for these violations because they occurred in the same time frame as material false statements previously cited by the NRC and for which adequate corrective actions had been taken.

The accuracy of information provided to the NRC is of utmost importance when that information is utilized to make determinations on the adequacy of facility design to protect public health and safety. Inaccurate information could result in decisions which adversely affect the health and safety of the public. The inaccurate information cited in violations I.G and I.H concerning the capability of certain doors in the facility to resist fire propagation misrepresented the fire containment design feature of the facility fire protection program. While these violations occurred during the time frame of previous enforcement action concerning other material false statements, that enforcement action does not relieve the licensee from the responsibility for providing accurate information to the NRC, nor does it relieve the licensee from liability for other material false statements.

CONCLUSION

These violations did occur as originally stated. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

Item I.I

STATEMENT OF NONCOMPLIANCE

The NRC staff requested by letters dated July 16 and 30, 1976, that the licensee make a comparison of the D. C. Cook Nuclear Plant fire protection program with the positions in Appendix A to Branch Technical Position APCSB 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976." One of the positions in Appendix A states, in part, "Effective administrative measures should be implemented to prohibit bulk storage of combustible

materials inside or adjacent to safety related buildings or systems during operation or maintenance periods ..." The licensee's response dated January 31, 1977, states, in part, "Administrative measures have been established to control the storage of combustible materials and to prohibit their storage in the vicinity of safety related systems."

Contrary to section 186 of the Atomic Energy Act of 1954, the statement in the licensee's January 31, 1977 response is a material false statement. It is false, in that it was determined during an NRC inspection that administrative measures had not been established at the time of the licensee's January 31, 1977 response and they were not established until July 28, 1977. This false statement is material, in that staff relied upon it in reaching its conclusions regarding the acceptability of the licensee's fire protection program.

(Civil Penalty - $4,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee's response to violation I.I has provided no new information regarding the basis for or circumstances surrounding this violation or civil penalty. The licensee contends that Plant Manager Instruction PMI-2090, Revision 1, implements administrative measures "to control the storage of combustible materials and to prohibit their storage in the vicinity of safety related systems" through a requirement that "Inspections of completed work by first line supervisors shall also include...removal of fire hazards and proper disposal of...oily rags." This contention extends the scope of this procedure beyond the instructions contained in the procedure. This procedure addresses the mechanism to control fire hazards resulting from a work activity. PMI-2090, Revision 1, did not control the general storage of combustible materials nor prohibit their storage in the vicinity of safety-related systems when the statement was made.

CONCLUSION

This violation as described above did occur as originally stated. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

Item II.A

STATEMENT OF NONCOMPLIANCE

Technical Specification 3.6.1.1 requires that primary containment integrity be maintained during power operation, startup, hot standby and hot shutdown (modes 1, 2, 3 and 4). If primary containment integrity is lost, it is required to be restored within one hour or the plant be placed in at least hot standby within the next six hours and in cold shutdown within the following 30 hours.

Contrary to the above, primary containment integrity was not maintained from about 10:45 a.m. on May 10, 1981, to 10:30 p.m. on May 12, 1981, (a period of about 60 hours) while the Unit 2 reactor was in hot standby and hot shutdown (modes 3 and 4) in that a containment sensing line plug, removed to install a test instrument, was not replaced following completion of the Integrated Leak Rate Test. The calculated leakage rate from the sensing line with the plug removed exceeded the limits allowed by the Technical Specification.

This is a Severity Level III violation (Supplement I).
(Civil Penalty - $30,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee's response admitted that the facts were correct as stated.

The licensee's contention for requesting mitigation of the civil penalty are: (1) the subject event was not similar to the event discussed during the January 13, 1981 Enforcement Conference; (2) the procedure was not inadequate since its purpose was to assure validity of the type A test required by 10 CFR 50, Appendix J; and (3) the corrective actions were taken promptly and additional control measures were promptly implemented.

The licensee contends that there is no basis for escalating the enforcement action by 25% because this event was not similar to prior violations. The civil penalty base amount for this violation was not increased based upon similarity.

The licensee's second contention is that the procedure was not supposed to assure restoration, only to conduct a successful leak rate test, and that "a technician overlooked sound maintenance practices."

Technical Specification 6.8.1, though not specifically cited, requires that procedures be established to ensure proper conduct of surveillance and test activities of safety-related equipment. To suggest that it is acceptable to rely merely on maintenance practices to ensure that containment integrity is maintained is an unacceptable premise.

The third contention for requesting mitigation of the civil penalty is that prompt corrective actions were taken.

Although it is agreed that the plug was promptly replaced when it was discovered missing, the corrective actions taken to prevent a similar occurrence were not implemented until about two months after the event (procedures dated July 9, 24, and 28, 1981).

CONCLUSION

As admitted by the licensee, the violation of Technical Specification 3.6.1.1 described above occurred as originally stated. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

Item II.B

STATEMENT OF NONCOMPLIANCE

Technical Specification 6.9.1.8 requires that NRC be notified of certain events within 24 hours by telephone and with a written followup report within 14 days. One event that requires reporting within 24 hours is: "Personnel error or procedural inadequacy which prevents, or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR."

10 CFR 50.72 requires the notification of the NRC Operations Center as soon as possible and in all cases within one hour by telephone of the occurrence of "Personnel error or procedural inadequacy which, during normal operations, anticipated operational occurrences, or accident conditions, prevents or could prevent, by itself, the fulfillment of the safety function of those structures, systems, and components important to safety that are needed to (i) shut down the reactor safely and maintain it in a safe shutdown condition, or (ii) remove residual heat following reactor shutdown, or (iii) limit the release of radioactive material to acceptable levels or reduce the potential for such release."

Contrary to the above, telephone notification was not made of the event described above in Item II.A and a written report was not submitted within 14 days. The event was identified by the licensee on May 12, 1981, but was not reported to the NRC until July 15, 1981.

This is a Severity Level III violation (Supplement I).
(Civil Penalty - $10,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee points out that the violation is partially incorrect in stating that the event was not reported until July 15, 1981. The licensee is correct. The July 15, 1981 date was the date of the revised event report which was originally submitted as a 30-day report on June 10, 1981.

The basis the licensee sets forth for requesting retraction of the civil penalty is that the issue is not a failure to report but a case of misclassifying the reportability of an event and submitting an untimely report. As noted in the NRC's December 30, 1981 letter transmitting the Notice of Violation and Proposed Imposition of Civil Penalties, the failure to notify the NRC in a timely manner is the basis for this item of noncompliance.

The licensee also states that the significance of this event did not warrant immediate reporting to the NRC, and that the applicability of this reporting requirement was not considered by the NRC in its initial evaluation. When the NRC Senior Resident Inspector became aware of this event, he presented his position to plant management that it was an ENS reportable event and required

prompt notification. After three-and-a-half weeks of consideration, the licensee decided to report it "promptly" (24-hour report). 10 CFR 50.72 is applicable to personnel errors which could prevent the function of the containment (limit release of radioactive material).

CONCLUSION

The violation of Technical Specification 6.9.1.8 and 10 CFR 50.72 did occur as stated except that the date "June 10, 1981" should be substituted for "July 15, 1981" as the date the licensee initially reported the event to NRC. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

Item III.B

STATEMENT OF NONCOMPLIANCE

Technical Specification 6.5.1.6 requires that the Plant Nuclear Safety Review Committee (PNSRC) be responsible for review of all procedures required by Technical Specification 6.8 and changes thereto. Technical Specification 6.8 includes requirements to have surveillance test procedures.

Contrary to the above, Surveillance Test Procedure 12THP4030 STP.202, Revision 3, was changed in that the isolation valves for containment pressure transmitters PPA-310 and PPA-311, which were not addressed in the procedure, were closed during the Integrated Leak Rate Test without review by the PNSRC.

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

EVALUATION OF LICENSEE'S RESPONSE

The licensee states that its position is essentially that the positioning of the containment pressure-sensing-line valves was not specified in the procedure since their positions have no bearing on the validity of the Type A leak measurement. Therefore, any change in alignment did not require review in accordance with Technical Specification 6.5.1.6.

Since the integrated leak rate test procedures do not specify whether the transmitters and associated sensing lines should be valved out, it must be assumed that these components remain in their normal operating position.

Instruments should not be isolated from the testable volume on a Type A test as discussed in 10 CFR 50 Appendix J. The instrument and associated sensing lines are considered to be an extension of containment.

CONCLUSION

The violation of Technical Specification 6.5.1.6 did occur as originally stated. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

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

Docket Nos. 50-272; 50-311
EA No. 82-113

OCT 27 1982

Public Service Electric and Gas Company
ATTN: Mr. Richard A. Uderitz
Vice President - Nuclear
Mail Code T15A
P. O. Box 270
Newark, New Jersey 07101

Gentlemen:

Subject: Inspection Nos. 50-272/82-15 and 50-311/82-15

This refers to the special physical protection inspection conducted by Mr. G. C. Smith of this office on June 14-18, 1982, at the Salem Nuclear Generating Station, Hancocks Bridge, New Jersey, of activities authorized by NRC Licenses DPR-70 and DPR-75 and to the discussions of our findings held by Mr. Smith with Mr. H. J. Midura at the conclusion of the inspection. During this inspection, violations associated with implementation of your physical security plan were identified.

These violations, described in the attached Notice to this letter, demonstrate that adequate management control of the security program at the Salem Nuclear Generating Station has not been implemented. In particular, Violation A, involving a change to a vital area barrier which degraded that barrier, clearly illustrates inadequate management control. Security management reviewed the change to the vital area barrier for compliance with physical protection requirements, but failed to recognize that an unacceptable degradation of the barrier occurred, resulting in noncompliance.

Previously a civil penalty was imposed on February 23, 1982 for security violations that resulted from inadequate management control. The recent violations, identified in June 1982, described in the attached Notice to this letter, demonstrate that prior corrective actions were ineffective in precluding recurrence of significant violations of your physical security plan.

On August 12, 1982, an Enforcement Conference was held at Region I between you and members of your staff, and Mr. Thomas T. Martin, Director, Division of Engineering and Technical Programs, and members of my staff, to discuss these violations and their fundamental causes. You addressed planned improvements including increased management overview, and review and revision of security plan implementing procedures. Specific details of these improvements and a schedule for their implementation were not provided.

Increased management attention to the physical security program is needed at the Salem Nuclear Generating Station. In order to emphasize this need, and after consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Forty Thousand Dollars for Violation A as set forth in the attached Notice to this letter. The

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violations in the Notice have been categorized by severity level in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C) published in the Federal Register (47 FR 9987) on March 9, 1982. You are required to respond to the Notice and you should follow the instructions specified in the Notice in preparing your response. In your response, you should place all Safeguards Information (as defined in 10 CFR 73.21) in enclosures, so as to allow your letter (without enclosures) to be placed in the Public Document Room.

In addition to your response to the Notice, additional information is necessary to understand the scope of your planned improvements in the security program, and to assess the effectiveness of those planned improvements. Accordingly, pursuant to Section 182 of the Atomic Energy Act of 1954, as amended, and 10 CFR 50.54(f), in order to determine whether or not Licenses DPR-70 and DPR-75 should be modified, you are requested to submit to this office, within thirty days of the date of this letter, a written plan for improving your security program, which includes the following:

1. Detailed descriptions of each specific planned improvement in the security program, including improvements in management control and overview, training programs, procedures, personnel, and equipment.

2. Schedules for implementation and completion of all planned improvements.

3. Documentation of completed improvements.

4. Methods for measuring the effectiveness of improvements.

In accordance with 10 CFR 73.21 of the NRC's regulations, documentation of security measures for the physical protection of special nuclear materials and certain plant equipment vital to the safety of production or utilization facilities is deemed to be Safeguards Information. Each person who produces, receives, or acquires Safeguards Information is required to ensure that it is protected against unauthorized disclosure. Therefore, the enclosures to this letter, except for the inspection report cover sheet, and the enclosures to your response to this letter will not be placed in the Public Document Room and will receive limited distribution pursuant to 10 CFR 73.21(c).

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

Sincerely,

Ronald C. Haynes
Regional Administrator

Enclosures:
1. Notice of Violation and Proposed Imposition of Civil Penalty
   (Contains Safeguards Information)
2. Combined NRC Region I Inspection Report Number
   50-272/82-15 and 50-311/82-15 (Contains Safeguards Information)

cc: (w/cy of report cover sheet only)
R. L. Mittl, General Manager - Corporate QA
H. J. Midura, General Manager - Salem Operations
E. A. Liden, Manager - Nuclear Licensing and Regulation
R. Fryling, Jr., Esquire

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

October 15, 1982

Docket No. 50-271
License No. DPR-28
EA 82-112

Vermont Yankee Nuclear Power Corporation
ATTN: Mr. W. F. Conway, President
and Chief Executive Officer
RD 5 Box 169, Ferry Road
Brattleboro, Vermont 05301

Gentlemen:

Our letter of May 12, 1982 regarding the April 24, 1982 loss of feedwater event at the Vermont Yankee facility indicated that NRC was considering appropriate enforcement action. We have completed our assessment of this event. This assessment included reviews by NRC staff of the Vermont Yankee operating license and relevant chapters of the facility final safety analysis report. The assessment also included an evaluation by NRC staff of information obtained during our followup of the event, specifically: (1) results of a special NRC inspection conducted at the facility on April 26-30; (2) results of an NRC investigation conducted at the facility on June 6-9; (3) information provided to the NRC staff during a meeting held on July 9, at Montpelier, Vermont with you and your staff and State of Vermont officials cognizant of nuclear power plant emergency preparedness and planning, and (4) information provided to Region I management during an Enforcement Conference held at this office on August 24 with you and your staff. Reports of our special inspection and investigation were transmitted to you on May 12, 1982 and July 21, 1982 (Inspection Report No. 50-271/82-07 and Investigation Report No. 50-271/82-12). The event sequence, cause(s) of the event, possible consequences of the event, actions of the plant staff during and subsequent to the event and the issue of willfulness were principal aspects of this assessment.

At the Enforcement Conference held on August 24, 1982, we discussed our specific concerns regarding the actions taken by the plant staff during this event. We are concerned that it took about an hour for the licensed staff to recognize that the High Pressure Coolant Injection (HPCI) system had automatically operated to recover coolant inventory during the transient. We have also determined that the Nuclear Safety Engineer (NSE) and operating crew functions were not properly integrated and that the procedures for classification of Emergency Action Levels were unclear. As a result of these deficiencies station personnel were not aware of Emergency Core Cooling System actuation, an inaccurate report was provided to the NRC at about 1:20 a.m. and plant personnel failed to recognize and, therefore, promptly classify the event in accordance with the emergency plan. Specifically, the HPCI actuation and injection event should have been recognized within minutes and then classified and reported to offsite officials in accordance with your emergency plan.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

We have concluded that station personnel's evaluation and reporting failures did not involve willfulness or careless disregard for requirements, nor was the public health and safety adversely affected. However, upon review of the circumstances associated with this event and after consultation with the Director, Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $40,000. This action is being taken to emphasize the importance of ensuring that operators properly evaluate events, including changes in the status of safety-related equipment, that the Nuclear Safety Engineer function is properly implemented, and that events are promptly recognized, classified and reported to offsite officials. The violation in the Notice has been categorized as Severity Level III in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C), published in the Federal Register, 47 FR 9987 (March 9, 1982).

At the Enforcement Conference on August 24, 1982, we discussed the measures needed to ensure that this violation is not repeated. Specifically, you need to improve training of plant personnel in transient analysis, and emergency response and management. The additional training should be incorporated into existing programs completed by personnel prior to assignment to the position of Shift Supervisor/plant emergency director, senior reactor operator or NSE. In addition, in accordance with the letter dated April 28, 1982, regarding the NRC Emergency Preparedness Appraisal team findings, you should have already completed revisions to your procedures relating to classification of Emergency Action Levels.

You are required to respond to the Notice and you should follow the instructions therein when preparing your response. Your reply should address the matters of emergency response and management training and describe the plans and steps that will be taken to achieve full integration of the NSE function with the operating crew.

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

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

Sincerely,

Ronald C. Haynes
Regional Administrator

Enclosure: Notice of Violation and Proposed Imposition
of Civil Penalty

cc w/encl:
J. P. Pelletier, Plant Manager
J. B. Sinclair, Licensing Engineer
W. P. Murphy, Vice President and
Manager of Operations
E. W. Jackson, Special Assistant
to the President
L. H. Heider, Vice President

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Vermont Yankee Nuclear Power Corporation
Vermont Yankee Nuclear Power Station

Docket No. 50-271
License No. DPR-28
EA 82-112

On April 24, 1982, at the Vermont Yankee Nuclear Power Station, Vernon, Vermont, the reactor feedwater control system malfunctioned causing a trip of the reactor feedwater pumps during power operation. Without this feedwater while the plant was still in power operation, the water inventory in the reactor pressure vessel rapidly decreased. Plant protective instrumentation detected the decreasing water inventory and automatically actuated reactor protection and engineered safeguards systems and components. These systems and components functioned as designed and mitigated the event. The automatic equipment operations included a reactor scram to shut down the plant, closure of reactor system isolation valves which stopped the removal of water from the reactor pressure vessel, and injection of water into the reactor pressure vessel by the high pressure injection system (an Emergency Core Cooling System) to replenish the water inventory.

The Shift Supervisor failed to recognize that the HPCI system had automatically operated to recover coolant inventory during the transient. Although the Nuclear Safety Engineer on duty at the time of the event recognized that HPCI had actuated, he failed to inform the Shift Supervisor of this fact. Consequently, in his 1:20 a.m. report to the NRC, the Shift Supervisor stated that the ECCS had not actuated (although it had actuated for just over one minute at approximately 1:00 a.m.). The Shift Supervisor did not recognize that HPCI had actuated until about 2:00 a.m. and the licensee did not notify the NRC or classify the event in accordance with the emergency plan until 3:51 a.m.. The NRC has determined that this series of events involves a significant violation of NRC requirements. A deficiency was demonstrated in the training of plant personnel in that the Shift Supervisor and licensed operators on duty during the event were not adequately aware of the status of safety-related equipment and failed to properly integrate the Nuclear Safety Engineer into the analysis/evaluation of transients In addition, the licensee's procedures for classifying the event and notifying offsite officials in accordance with the emergency plan were inadequate. As a result, the event was not properly evaluated and reported at about 1:20 a.m.

To emphasize (1) the importance of proper training to ensure prompt recognition of changes in the status of safety-related equipment and integration of the functions of the NSE into operating crew activities and (2) the importance of promptly recognizing, classifying and reporting events in accordance with the emergency plan, the NRC proposes to impose a civil penalty 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 violation and the associated civil penalty is set forth below:

A. Technical Specification 6.0, "Administrative Controls" states that "Administrative controls are the written rules, orders, instructions, procedures, policies, practices, and the designation of authorities and responsibilities by the management to obtain assurance of safety and quality of operation and maintenance of a nuclear power reactor. These controls shall be adhered to."

Station Procedure A.P.0150 Rev No. 17, "Responsibilities and Authorities of Operations Department Personnel," states, in part, that the Shift Supervisor is responsible

> "To supervise and approve the safe and proper operation of the Vermont Yankee Nuclear Power Station on his appointed shift. This shall be accomplished by maintaining the broadest perspective of operational conditions affecting the safety of the plant through all conditions of startup, power generation, shutdown, refueling, and emergency operations.
>
> "Total involvement in any single operation in times of an emergency when multiple operations are required to bring the plant into a safe condition is considered to be a violation of this responsibility. Priority items of concern should be analyzed at first-hand while items of less priority should be delegated to other qualified personnel within the plant."

Station Procedure A.P. 0469, "Responsibilities and Authorities of The Nuclear Safety Engineer," states, in part, that the Shift Technical Advisor "Provide advice and recommendations to the Shift Supervisor regarding plant status and activities as they relate to plant and public safety."

B. 10 CFR 50.54(q) requires a licensee to follow and maintain in effect emergency plans which meet the standards in 10 CFR 50.47(b) and the requirements in 10 CFR 50, Appendix E. The Vermont Yankee Emergency Plan was written to implement the requirements of 10 CFR 50.54(q).

Section 3 of the Emergency Plan requires that the Shift Supervisor recognize emergency conditions and classify events in accordance with the Emergency Classification System. Section 5 of the Emergency Plan specifies the emergency classifications of events. Section 9 of the Emergency Plan specifies the requirements for classification of events.

Contrary to the above, on April 24, 1982 operations personnel failed to properly evaluate a loss of feedwater event which resulted in a low low reactor water level condition which initiated ECCS on April 24, 1982 at about 1:00 a.m. The Shift Supervisor was not adequately aware of the change in status of safety-related equipment or the cause for this change. Although the Nuclear Safety Engineer was aware that High Pressure Coolant Injection had initiated, he did not assist the Shift Supervisor in evaluating the transient. After the loss of feedwater event that resulted in Emergency Core Cooling System automatic initiation and injection at about 1:00 a.m., the licensee failed to recognize and, therefore, promptly classify this event in accordance with the requirements of the Vermont Yankee Emergency Plan when the conditions for classification existed or were known.

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

Pursuant to the provisions of 10 CFR 2.201, Vermont Yankee Nuclear Power Corporation is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, DC 20555, with a copy to this Office, within 30 days of the date of this Notice, a written statement or explanation in reply, including: (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. Where good cause is shown, consideration will be given to extending your response time. 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, Vermont Yankee Nuclear Power Corporation may pay the civil penalty in the amount of $40,000 or may protest imposition of the civil penalty in whole or in part by a written answer. Should Vermont Yankee Nuclear Power Corporation 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 Vermont Yankee Nuclear Power Corporation elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer may: (1) deny the violations listed in this Notice in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty. In requesting mitigation of the proposed penalty, the five factors contained in Section IV.B of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., in giving page and paragraph numbers) to avoid repetition. Vermont Yankee Nuclear Power Corporation'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 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

Ronald C. Haynes
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 15th day of October 1982.

II. MATERIALS LICENSEES

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

DEC 16 1982

License No. 14-11999-01
EA 82-123

Chemplex Company
ATTN: Mr. James Schoor
President
3100 Golf Road
Rolling Meadows, IL 60008

Gentlemen:

This refers to a special safety inspection conducted by J. R. Madera of our staff on September 13 and 14, 1982, of activities authorized by NRC Byproduct Material License No. 14-11999-01. The results of the inspection were discussed on October 4, 1982 during an enforcement conference in the Region III office between Messrs. P. Jarratt, J. Eisenhauer and B. Reeve of your staff and Mr. A. B. Davis and others of the NRC staff.

The inspection showed, among other things, that licensee management failed to ensure that licensed radioactive material stored in an unrestricted area was secured against unauthorized removal. As a result, a 3 millicurie cesium-137 sealed calibration source was lost or stolen and when you discovered the loss on August 24, 1982, a timely report was not made to the NRC.

After consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the cumulative amount of Five Hundred Dollars. This action is being taken in order to emphasize the need for you to improve your controls of licensed activities.

You are required to respond to the Notice of Violation and in preparing your response you should follow the instructions in the Notice. You should give particular attention to those actions designed to ensure continuing compliance with NRC requirements. In particular, your response 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.

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 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 otherwise 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

As a result of a special safety inspection conducted at Clinton, Iowa on September 13 and 14, 1982, it has become apparent that violations of NRC requirements have occurred. The most significant violations relate to the licensee's failure to ensure that licensed material stored in an unrestricted area was secured from unauthorized removal from the place of storage and the failure to immediately report to the NRC Regional Office the loss or theft of a 3 millicurie cesium-137 sealed calibration source after the occurrence became known on August 24, 1982.

In order to emphasize the responsibility of licensees to properly control their licensed programs, NRC proposes to impose a civil penalty in the amount of Five Hundred Dollars. 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 civil penalty are set forth in Section I below:

I. CIVIL PENALTY VIOLATION

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

Contrary to the above, a storage container housing a Texas Nuclear cesium-137 sealed calibration source was not secured from unauthorized removal while it was stored in an unrestricted area. The licensee's failure to secure the 3 millicurie cesium-137 sealed calibration source led to the theft or loss of the source.

This is a Severity Level III violation (Supplement IV). (Civil Penalty - $500).

II. VIOLATIONS NOT ASSESSED CIVIL PENALTIES

A. 10 CFR 20.402(a) requires that each licensee shall report by telephone to the Director of the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office immediately after its occurrence becomes known to the licensee, any loss or theft of licensed material in such quantities and under such circumstances that it appears to the licensee that a substantial hazard may result to persons in unrestricted areas.

Contrary to the above, the licensee did not notify the Nuclear Regulatory Commission Regional Office until September 1, 1982 that a 3 millicurie Texas Nuclear cesium-137 sealed calibration source contained in a storage container was lost or stolen, although the loss was known to the licensee on August 24, 1982.

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

B. License Condition No. 13 of the license dated August 30, 1977 states that sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.

Contrary to the above, four Ohmart Corporation Model A-5771, 200 millicurie cesium-137 sealed sources were removed by licensee personnel from source holders and were placed in storage and shipping containers. Specifically, the removal of the sources from the source well holders has been carried out at intervals of 12-24 months by licensee personnel. This procedure dates back prior to 1974 and the most recent removal occurred in May 1981.

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

C. License Condition No. 8.E authorizes the licensee to possess two In-Val-Co Model B20-14A cobalt-60 sealed sources not to exceed 700 millicuries each and four In-Val-Co Model B20-14A cobalt-60 sealed sources not to exceed 850 millicuries each.

Contrary to the above, the record of an inventory performed by the licensee on September 14, 1982 showed that these limits were exceeded. Specifically, four In-Val-Co, Model B20-14A cobalt-60 sealed sources contained in In-Val-Co, Model B20-100 source holders each had a source strength of 1,000 millicuries at the time of purchase in 1969.

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

D. 10 CFR 20.105(b)(2) requires that no licensee shall possess, use or transfer licensed material in such a manner as to create, in any unrestricted area and due to radioactive material and other sources of radiation in his possession, radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of 100 millirems in any seven consecutive days.

Contrary to the above, the storage container and the Texas Nuclear 3 millicurie cesium-137 calibration source were stored in an unrestricted area outside the Electrical Work Shop. The licensee submitted to the NRC technical specifications of the source and source container on October 27, 1969, in conjunction with a license application. These specifications showed that the radiation level at one foot from the surface of the storage container was 1-2 mR/hr. Therefore, if an individual were continuously present it could result in his receiving a radiation dose of 336 millirems in seven consecutive days.

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

E. License Condition No. 16 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in certain referenced applications and letters. The referenced letter dated April 11, 1968 and the application dated March 28, 1977 state that leak tests on sealed sources containing licensed material shall be performed by designated individuals who have received specific training at the Texas Nuclear Corporation and have been approved by the licensee's radiation committee.

Contrary to the above, leak tests have been routinely performed by individuals who have not received specific training at the Texas Nuclear Corporation and have not been approved by the licensee's radiation committee.

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

F. License Condition No. 14.A states that each sealed source containing byproduct material other than hydrogen-3, where the half-life is greater than 30 days and is in any form other than gas, shall be tested for leakage and/or contamination at intervals not to exceed six months except that sealed sources in Nuclear-Chicago gauging devices shall be tested for leakage and/or contamination at intervals not to exceed three years.

Contrary to the above, the licensee's leak test records showed that the Texas Nuclear 3 millicurie cesium-137 sealed calibration source had not been tested for leakage or contamination since April 30, 1981.

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

G. License Condition No. 14.B of the license dated August 30, 1977 states that records of leak tests shall be kept in units of microcuries and maintained for inspection by the Commission.

Contrary to the above, a review of the leak test records showed that the test results were not in units of microcuries.

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

H. 10 CFR 19.11(a), (b), and (c) requires that current copies of Part 19, Part 20, license conditions, documents incorporated into the license, license amendments and operating procedures, and Form NRC-3, be posted or that a notice describing these documents and where they may be examined, be posted.

Contrary to the above, on the dates of the inspection, September 13 and 14, 1982, neither a Form NRC-3 and the referenced documents nor a notice describing where these documents could be examined was posted.

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

I. 10 CFR 19.12 requires that all individuals working in or frequenting any portion of a restricted area shall be kept informed of the storage, transfer, or use of radioactive materials, precautions or procedures to minimize exposure, and the applicable provisions of Commission regulations.

Contrary to the above, on the dates of the inspection, September 13 and 14, 1982, individuals who work in restricted areas stated they had not been instructed in the applicable provisions of the regulations and precautions or procedures to minimize exposure.

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

J. 10 CFR 30.51 requires that a person who receives byproduct material pursuant to a license shall keep records showing the receipt of such byproduct material.

Contrary to the above, the licensee did not maintain records of the receipt of 19 sealed sources containing byproduct material.

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

K. License Condition No. 16 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in certain referenced applications and letters.

One letter, dated April 11, 1968, is such a referenced letter. In an attachment to it entitled "Inspection and Installation Procedure," the requirements are set forth, that a radiation survey is to be made by the installer, and a radiation survey record will be filled out and filed as a permanent record.

Contrary to the above, the licensee had survey records for 11 sources although a total of 29 sources had been installed.

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

Pursuant to the provisions of 10 CFR 2.201, Chemplex Company is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, and a copy to the Regional Administrator, USNRC, Region 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. 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, Chemplex Company may pay the civil penalty in the amount of Five Hundred Dollars or may protest imposition of the civil penalty in whole or in part by a written answer. Should Chemplex 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 Chemplex 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 in whole or in part, such answer may request remission or mitigation of the penalty. In requesting mitigation of the proposed penalty, the five factors contained in Section IV(B) of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Chemplex 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 16 day of December 1982

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

APR 12 1982

License No. 21-00215-04
EA 82-51

University of Michigan
ATTN: Charles G. Overberger, Ph.D.
Vice President for Research
4080 Administration Building
Ann Arbor, MI 48109

Gentlemen:

This refers to the special inspection on January 20, 1982, and February 2 and 3, 1982, conducted by Mr. R. E. Burgin of our staff, at the University of Michigan in Ann Arbor, Michigan. The results of the inspection were discussed during an enforcement conference on February 18, 1982 in the Region III Office between Dr. Alan Price and others of your staff and Mr. A. B. Davis and others of the Region III staff.

The inspection showed the licensee failed to adequately evaluate the discharge of iodine-131 from a hood in the nuclear pharmacy. As a result, concentrations of iodine-131 in excess of permissible limits were released to an unrestricted area. This is of particular concern because this program was started in 1975 and no measurements of the effluent to an unrestricted area were made until February 3, 1982. Offsetting this is the conscientious effort of the University to report and remedy the problem, once recognized.

After balancing these considerations, we propose to impose civil penalties in the cumulative amount of Two Thousand Dollars for the violations set forth in the Appendix to this letter in order to emphasize the need for making adequate evaluations and controlling the release of licensed material. These items have been categorized as Severity Level III Violations in accordance with the NRC Enforcement Policy published in the Federal Register 47 FR 9987 (March 9, 1982).

You are required to respond to the Notice of Violation. In preparing your response you should follow the instructions in the Appendix. You should give particular attention to those actions that will be taken to ensure that, in the future, potential releases of radioactive material to unrestricted areas will be properly evaluated. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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 Appendix 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:
Appendix - Notice of Violation and
Proposed Imposition of Civil Penalties

cc:
Michigan Department of Public Health
ATTN: Donald E. Van Farowe, Chief
Division of Radiological Health
3500 North Logan Street
P.O. Box 30035
Lansing, MI 48909

Appendix

NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

University of Michigan
4080 Administration Bldg.
Ann Arbor, MI 48109

License No. 21-00215-04
EA 82-51

As a result of the special inspection conducted at the University of Michigan, Ann Arbor, Michigan, on January 20, 1982, and February 2 and 3, 1982, it appears violations of NRC requirements have occurred. These violations relate to the licensee's failure to evaluate the concentration of iodine-131 released from a hood over a period of about seven years. For the past five years the release of iodine-131 was in excess of regulatory limits to an unrestricted area. Accordingly, in order to emphasize the need for making adequate evaluations and controlling the release of licensed material to an unrestricted area, the NRC proposes to impose civil penalties in the cumulative amount of Two Thousand Dollars. 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 civil penalties are set forth in Parts A and B below:

A. 10 CFR 20.201(b) requires that each licensee shall make or cause to be made such surveys as may be necessary for him to comply with the regulations in this part. Section 20.201(a) defines "survey" as an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions. When appropriate, such evaluation includes a physical survey of the location of materials and equipment, and measurements of radioactive material present.

Contrary to the above, the licensee failed to make an adequate evaluation of the concentration of iodine-131 that was released to an unrestricted area from a hood in the nuclear pharmacy. Specifically, although the production of ^{131}I-iodocholesterol (NP-59) was started in 1975 and the procedure had been repeated every two weeks until February 3, 1982, no measurements of airborne concentrations of iodine-131 released to an unrestricted area were made until February 3, 1982.

This is a Severity Level III Violation (Supplement IV).
(Civil Penalty - $1,500).

B. 10 CFR 20.106(a) requires that the licensee shall not possess, use, or transfer licensed material so as to release to an unrestricted area radioactive material in concentrations that exceed the limits specified in Appendix B, Table II of 10 CFR Part 20. The concentrations may be averaged over a period not greater than one year.

Contrary to the above, the licensee's bi-weekly production of ^{131}I-iodocholesterol (NP-59) resulted in releases of iodine-131 to unrestricted areas that were in excess of the maximum permissible concentration.

This is a Severity Level III Violation (Supplement IV). (Civil Penalty - $500).

Pursuant to the provisions of 10 CFR 2.201 the University of Michigan is hereby required to submit to this office 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. Consideration may be given to extending your response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the University of Michigan may pay the civil penalty in the amount of Two Thousand Dollars or may protest imposition of the civil penalty in whole or in part by a written answer. Should the University of Michigan fail to answer within the time specified, this office will issue an Order imposing the civil penalty in the amount proposed above. Should the University of Michigan 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 penalties, the five factors contained in Section IV (B) of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The University of Michigan'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

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 12 day April 1982

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

SEP 9 1982

License No. 21-00215-04
EA 82-51

University of Michigan
ATTN: Charles G. Overberger, Ph.D.
Vice President for Research
4080 Administration Building
Ann Arbor, MI 48109

Gentlemen:

This is in reference to your letter dated May 19, 1982 in response to the Notice of Violation and Proposed Imposition of Civil Penalties sent to you with our letter dated April 12, 1982. Our April 12, 1982 letter concerned violations found during a special inspection conducted on January 20 and February 2 and 3, 1982.

After careful consideration of your response and for the reasons given in the enclosed Order, we have concluded that the violations did occur as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties. However, based on our review of the circumstances of this event we have concluded that a reduction in the proposed civil penalty is appropriate. Since the releases of iodine-131 were only moderately in excess of Part 20 limits and since it was unlikely that any individual received a significant exposure, the Severity Level of Violation B has been reduced from III to IV and the associated $500 civil penalty has been remitted. Accordingly, we hereby serve the enclosed Order on the University of Michigan imposing a civil penalty in the amount of $1,500.

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,

RC DeYoung

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosures:
Order Imposing a Civil Penalty
Appendix - Evaluations and
Conclusions

cc: Michigan Dept of Public Health

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

U.S. NUCLEAR REGULATORY COMMISSION

In the Matter of

University of Michigan Ann Arbor, MI 48109	) Byproduct Material) License No. 21-00215-04) EA 82-51

ORDER IMPOSING A CIVIL PENALTY

I

The University of Michigan, Ann Arbor, Michigan (the "licensee") is the holder of Byproduct Material License No. 21-00215-04 (the "license") issued by the Nuclear Regulatory Commission (the "Commission") which authorizes the licensee to conduct medical research, diagnosis, and therapy. The license was issued on February 15, 1957 and has an expiration date of November 30, 1982.

II

A special inspection was conducted at the University of Michigan on January 20, 1982, and February 2 and 3, 1982. This inspection was conducted to review the unplanned release of iodine-131 to an unrestricted area in excess of 10 CFR Part 20 limits. As a result of this inspection, a Notice of Violation was served upon the licensee by letter dated April 12, 1982 which identified two apparent items of noncompliance, including the inadequate evaluation of radiation hazards and the release of iodine-131 in concentrations in excess of Part 20 limits. Based on these findings, it appears the licensee has not conducted its activities in full compliance with the Commission's requirements.

A written Notice of Violation and Proposed Imposition of Civil Penalties was served upon the licensee by letter dated April 12, 1982. This Notice stated the nature of the violations, the provisions of the Commission's regulations which had been violated, and the proposed amount of civil penalty. Answers to the Notice of Violation and Proposed Imposition of Civil Penalties were received from the licensee on May 24, 1982.

III

Upon consideration of the answers received and the statements of fact, explanation, and argument for remission, mitigation or cancellation contained therein, as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined that the penalty proposed for Violation A as designated in the Notice of Violation and Proposed Imposition of Civil Penalties should be imposed.

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 One Thousand Five Hundred Dollars within thirty days of the date of this Order, by check, draft, or money order payable to the Treasurer of the United States and mailed to the Director of the Office of Inspection and Enforcement.

IV

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

V

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 violated a Commission regulation as set forth in Violation A of the Notice of Violation and Proposed Imposition of Civil Penalties dated April 12, 1982, and

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

FOR THE NUCLEAR REGULATORY COMMISSION

R.C. DeYoung

Richard C. DeYoung, Director

Office of Inspection and Enforcement

Dated at Bethesda, Maryland

this 9thday of September 1982

APPENDIX

EVALUATIONS AND CONCLUSIONS

For each item of noncompliance and associated civil penalty identified in the Notice of Violation (dated April 12, 1982) the original item of noncompliance is restated, pertinent statements in the licensee's response are stated and the Office of Inspection and Enforcement's evaluation and conclusion regarding the licensee's response (dated May 19, 1982) to each item is presented.

VIOLATION A

STATEMENT OF NONCOMPLIANCE

10 CFR 20.201(b) requires that each licensee shall make or cause to be made such surveys as may be necessary for the licensee to comply with the regulations in this part. Section 20.201(a) defines "survey" as an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions. When appropriate, such evaluation includes a physical survey of the location of materials and equipment, and measurements of radioactive material present.

Contrary to the above, the licensee failed to make an adequate evaluation of the concentration of iodine-131 that was released to an unrestricted area from a hood in the nuclear pharmacy. Specifically, although the production of ^{131}I-iodocholesterol (NP-59) was started in 1975 and the procedure had been repeated at two-week intervals until February 3, 1982, no measurements were made until February 3, 1982 of airborne concentrations of iodine-131 released to an unrestricted area.

This is a Severity Level III violation (Supplement IV)
(Civil Penalty - $1,500)

PERTINENT STATEMENTS IN LICENSEE'S RESPONSE

The licensee's response stated:

a. The University of Michigan does not dispute the mathematical facts as cited in the Notice of Violation nor in the Inspection Report. However, we do not agree with some of the conclusions drawn.

b. Your Inspection Report states on page 5, "Dr. Ice, at the time of approval, was a Nuclear Pharmacist and Certified Health Physicist. Based solely upon Dr. Ice's professional experience and verbal assurance that no I-131 would be released, the Committee approved the protocol and required no monitoring for airborne I-131. Considering the volatility of iodine compounds...measurements of release concentrations would have been appropriate."

c. In fact, there was written documentation in the 1975 application for radioisotope procurement by Mr. James Carey, Radiation Health Physicist, for the clinical protocol of Dr. William Beirwaltes, Chief of Nuclear Medicine. That application states "The radiochemical, chemical, and radionuclide purity of the compound has been established for the compound during animal studies. The product is stable as formulated."

d. It was from this written record, at the time of the initial evaluation in 1975 by Radiation Control Service, that the conclusion was drawn that the chemical compound was in fact stable and not volatile.

EVALUATION OF LICENSEE'S RESPONSE

In its response, the licensee stated that it had relied upon the technical determination that the NP-59 compound was stable in concluding that further evaluation of iodine-131 releases was not necessary. That determination was based upon a statement in the 1975 application by James Carey, the licensee's Radiation Health Physicist, for procurement of the radioisotope to be used pursuant to the clinical protocol of Dr. William Beierwaltes, the licensee's Chief of Nuclear Medicine. The application stated, "The radiochemical, chemical and radionuclide purity of the compound has been established for the compound during animal studies. The product is stable as formulated." (Emphasis added.) The licensee also denies the allegation in the Inspection Report that it relied solely on the opinion of Dr. Rodney Ice that no radionuclides would be released in concluding that no effluent monitoring be done. Finally, the licensee states that during the first two years the effluent concentrations were within regulatory limits, as was acknowledged in the Inspection Report, thus justifying the decision not to conduct effluent monitoring.

The 1975 application by Mr. Carey, referring to the "product" (emphasis added), concerns the clinical use of NP-59 for adrenal cortex imaging. That application refers to the end product and does not address the formulation process, the volatility of NP-59 precursors, nor health physics considerations during production. Consequently, the licensee's reliance upon the stability of the NP-59 compound was misplaced.

The licensee's reliance on Dr. Ice's professional opinion in deciding to omit effluent monitoring was evidenced by statements by licensee representative during the February 1982 special inspection, and by the following statement in an internal memorandum of the licensee:

> When installation of the laminar flow hood was initially proposed, Dr. Rodney Ice represented that no radioactive material would be released to the atmosphere from operations conducted in it. Based on this representation, routine effluent monitoring was not conducted. Memorandum, Solari to Beierwaltes, January 13, 1982.

Finally, the satisfactory effluent emissions for the first two years of operation were, as the Inspection Report noted, due to use of smaller quantities of radioactive materials in those years. The facts indicate that for an extended period, seven years, the licensee was not conducting sufficient surveys to meet the requirements of 10 CFR 20.201(b), and that for the last five of those years there were excessive emissions of radioactivity.

It must be noted that licensee personnel were aware of the survey deficiencies and the possibility of iodine-131 releases as early as October 1981. Nonetheless, no monitoring was conducted during October 1981, or during NP-59 synthesizing runs on November 3 and 17 and December 7 and 16, 1981. No work-area monitoring was conducted until January 11, 1982, and actual exhaust monitoring was not conducted until February 3, 1982, during the course of the special inspection. Good health physics practice, considering the volatility of iodine-labeled compounds in general, and the large quantities of iodine-131 used by the licensee (up to 375.0 millicuries per synthesis), would dictate the use of air monitoring to adequately evaluate the radiation hazards incident to the production and use of NP-59.

In its response to the Notice of Violation and Proposed Imposition of Civil Penalty, the licensee protested application of the NRC Enforcement Policy, 47 FR 9987 (March 9, 1982) in this case. The licensee stated that under NRC Manual Chapters MC 0535 and 0800, which guided NRC's enforcement activities prior to October 7, 1980 (when the Interim Enforcement Policy, a preliminary version of the current Enforcement Policy, was published in the Federal Register), it is unlikely that there would have been any penalties imposed. The licensee states in effect that NRC inspections on April 10-13, 1978 and June 19, 1979 should have detected the violations. Therefore, the violations should be treated as they would have been in 1978 and 1979.

The licensee cannot exonerate itself by citing NRC's failure to observe the violation at an earlier date. The function of NRC inspections is to audit a licensee's compliance with the Commission's requirements. It is the licensee's responsibility to assure compliance with regulatory requirements, and the licensee cannot rely upon the NRC to achieve this end. In addition, the violation continued in existence for an extended period after the Interim Enforcement Policy was published. Therefore, even if the period of noncompliance were to be bifurcated, and the period of noncompliance prior to October 7, 1980 is not considered for penalty, there remains a period of over one year of noncompliance for which a civil penalty is appropriate under the Interim Enforcement Policy. (Application of the Interim Enforcement Policy does not lead to a significantly different result than would the later Enforcement Policy. This was acknowledged in the licensee's response.)

The licensee further states that the violations cited in the April 12, 1982 Notice met the NRC's criteria for not issuing a Notice of Violation. Reference was made to criteria contained in Part IV(A), of the Enforcement Policy, 47 FR 9987, 9991 (March 9, 1982). For this case, the critical criterion in the

Enforcement Policy, Part IV(A) concerning non-issuance of a Notice of Violation, is the severity level of the violations in question here. The licensee argues that no Severity Level III violation occurred and consequently a Notice of Violation should not have been issued. We disagree.

Failure to survey as required in Part 20 of the NRC regulations must be seen as "cause for significant concern," Enforcement Policy, 47 FR 9987, 9990 (March 9, 1982), thereby meeting the fundamental characteristic of a Severity Level III violation. This is because failure to survey can lead to emissions or exposures that exceed regulatory limits, as happened here. That the release here was only moderately in excess of regulatory limits is fortunate from a health and safety perspective, but fortuitous. Failure to monitor emissions over a seven-year period could obviously have had much more serious consequences. See Paragraph C.4. of Supplement IV of the Enforcement Policy, 47 FR 9994 (March 9, 1982), where "Substantial potential for an exposure or release in excess of 10 CFR Part 20 whether or not such exposure or release occurs" (emphasis added) is given as an example of a Severity Level III violation. Therefore, under the NRC Enforcement Policy, the noncompliance at issue was properly characterized as a Severity Level III violation, and the issuance of a Notice of Violation was appropriate.

CONCLUSION

We conclude that Violation A occurred as stated in the Notice of Violation and Proposed Imposition of Civil Penalty issued on April 12, 1982. The licensee's response has not stated a basis for mitigation or remission of the civil penalty proposed therein.

VIOLATION B

STATEMENT OF NONCOMPLIANCE

10 CFR 20.106(a) requires that the licensee shall not possess, use, or transfer licensed material so as to release to an unrestricted area radioactive material in concentrations which exceed the limits specified in Appendix B, Table II of 10 CFR Part 20. The concentrations may be averaged over a period not greater than one year.

Contrary to the above, the licensee's bi-weekly production of ^{131}I-iodocholesterol (NP-59) resulted in releases of iodine-131 to unrestricted areas that were slightly in excess of the maximum permissible concentration.

This is a Severity Level III violation (Supplement IV)
(Civil Penalty - $500)

PERTINENT STATEMENTS IN LICENSEE'S RESPONSE

The licensee's response stated:

a. While we do not dispute the accuracy of the data collected and summarized in the Inspection Report, we have severe objections to their use as raw data to support the conclusions of the Inspection Report.

b. For an individual to be exposed to this 1.87-fold MPC (maximum permissible concentration), that person would have to have been magically suspended precisely in mid-plume, 18 feet above the ground at the edge of the buildin for a period of one year with his nose at the outlet on the wall of the building.

c. The air sampler used was physically located within the hood exhaust ductwork, about 18 inches in from the wall, and not at the physical point of release. Thus, any air sample taken at that location will overestimate the actual release since some radioactivity will impact on the fan housing, the inside of the exhaust louvers...without actually being released from the exhaust system....

d. Annual exhaust concentrations do not exceed applicable limits when employing a 10-foot extension (hemispherical bubble) of the restricted area outside the exhaust duct. It was pointed out during the enforcement conference on February 18, 1982 that the concentration limits of Part 20 must be met at the point of discharge (vent) unless otherwise authorized by specific license condition.

EVALUATION OF LICENSEE RESPONSE

The licensee points out that the emission release was from a point 18 feet above the ground, more than 10 feet from any air conditioners or other air intake, and consequently it was unlikely that any individual would be exposed to emissions in excess of regulatory limits. The licensee goes on to set forth what are, in effect, preposterous assumptions which would need to be fulfilled to conclude that any individual was exposed to releases exceeding the maximum permissible concentration of radioactivity.

The licensee proposes to evaluate the emission concentration based upon the assumption of a 10-foot "bubble" around the point of discharge. At this 10-foot bubble boundary, concentrations are claimed to be within regulatory limits. The response refers to the licensee's February 15, 1982 report for the supporting computations.

The licensee also states that the air sampler used in the inspection was within the hood exhaust ductwork, about 18 inches in from the wall, and not at the actual point of release. This is stated to result in an overestimate of the release of radioactivity, since some radioactivity would "impact" the inside of the louvers, the fan housing "and other items without actually being released from the exhaust system to any point outside the building."

It is not NRC's contention that any individual was or may have been exposed to iodine-131 concentrations in excess of applicable limits. The item of noncompliance addresses the release of radioactive material to an unrestricted area in concentrations which exceeded the limits specified in the regulations. The location of the exhaust vent makes the 10-foot bubble concept relevant to an assessment of the health and safety implications of the emissions. These were minor. However, the 10-foot bubble was not a restricted zone and was not controlled as such. Consequently it does not establish the point at which emission concentrations must be evaluated in determining whether or not the violation occurred. The correct point is the point of discharge into an unrestricted area.

The determination of monitoring point locations and actual sampling and counting (quantifications) were performed by licensee representatives using licensee equipment. The licensee has not presented any quantitative information to support its assertion that released iodine-131 concentrations were less than stated in the Notice of Violation or did not exceed regulatory limits. Therefore, we accept as fact those numbers (concentrations) submitted by the licensee.

It should be noted that the item of noncompliance is based on a single-run sampling conducted on February 3, 1982 which utilized 116.5 millicuries of NP-59 stock solution. The average quantity used per run from 1977 through 1981 was 131.28 millicuries, with single runs as high as 375.0 millicuries. The 1.87 MPC concentrations may actually underestimate average releases since 1977.

CONCLUSION

The licensee has not demonstrated that Violation B did not occur as stated. However, the licensee's response does lead to the conclusion that although the emissions exceeded regulatory limits, the emissions were not of significant health and safety concern. Accordingly, this violation has been recategorized to Severity Level IV, and the proposed penalty of $500 is remitted.

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

License No. 13-11822-01
EA 82-94

JUL 22 1982

Midstate Testing Laboratory, Inc.
ATTN: Mr. Richard J. Mason
President
7943 New Jersey Avenue
Hammond, IN 46323

Dear Mr. Mason:

Since June 4, 1982, representatives of the NRC's Region III office have attempted unsuccessfully to contact you regarding activities under License No. 13-11822-01 at your premises in Hammond, Indiana and your apparent abandonment of the premises and radioactive material stored there. In view of the circumstances, I am issuing the enclosed Order to show cause why your license should not be revoked. The Order also suspends your license effective immediately and requires you to transfer within 5 days all licensed material to a person authorized to receive it. If you do not comply with this Order, the Commission will take measures to ensure transfer of the material and to otherwise enforce the terms of this Order. If you have any questions concerning this Order and the necessary steps to comply with it, please call Carl J. Papariello or William H. Schultz of the NRC Region III office at (312) 932-2500.

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

Sincerely,

RC DeYoung

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Order to Show Cause and
Order Suspending License
Effective Immediately

cc: Indiana State Board of Health
ATTN: Virgil J. Konopinski, Director
Division of Industrial Hygiene
and Radiological Health
1330 West Michigan Street
Indianapolis, IN 46206

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

U. S. NUCLEAR REGULATORY COMMISSION

In the Matter of

Midstate Testing Laboratory, Inc. 7943 New Jersey Avenue Hammond, Indiana 46323	)))	Byproduct Material License No. 13-11822-01 EA 82-94

ORDER TO SHOW CAUSE AND ORDER

SUSPENDING LICENSE EFFECTIVE IMMEDIATELY

I

Midstate Testing Laboratory, Inc. (the "licensee") holds Byproduct Material License No. 13-11822-01 (the "license") issued by the Nuclear Regulatory Commission. The license authorizes the licensee to use and possess byproduct material in the performance of radiographic operations under conditions specified in the license and the Commission's regulations. The license expires on February 29, 1984.

II

On June 2, 1982 the Senior Inspector of Midstate Testing Laboratory, Inc., contacted the NRC Region III office and stated that Midstate Testing Laboratory, Inc., was going bankrupt and was "locked out" of their facility on June 2, 1982.

On June 2, 1982 the NRC Region III office contacted the landlord, Kennedy Industrial Parks, and verified that Midstate Testing Laboratory, Inc. had been locked out of its facility located at 7943 New Jersey Avenue in Hammond, Indiana.

The NRC Region III office made numerous attempts to contact the president of Midstate Testing Laboratory, Inc. by telephone during the period June 4 through June 17, 1982, but was not able to establish contact.

On June 18, 1982 the NRC Region III office inspected the Midstate Testing Laboratory, Inc. facility with the landlord's permission. It was noted the licensee's inventory consisted of five radiographic exposure devices, three sealed radiography sources, and one soil moisture probe containing radioactive material.

On June 22, 1982 the NRC Region III office sent a letter to the president of Midstate Testing Laboratory, Inc., at the Hammond, Indiana address. The letter stated that if the licensee did not contact NRC by 4:00 p.m. on June 28, 1982, and make arrangements to transfer the radioactive material the NRC would take measures to ensure that the radioactive material would be placed in a safe storage location pending final disposal.

The licensee, Midstate Testing Laboratory, Inc., has not contacted the NRC or made arrangements to transfer the radioactive material. Therefore, the president of Midstate Testing Laboratory, Inc., has apparently abandoned the radioactive material.

The abandonment of radioactive material by a licensee is a condition that would warrant the Commission to refuse to grant a license on an original application. Under 10 CFR 30.34(f), licensees are required to notify the Commission in writing

when the licensee decides to permanently discontinue all activities involving materials authorized under a license. In the circumstances at hand, the licensee has apparently abandoned his place of business and the licensed material at the business premises, and the licensee has made no apparent arrangements to transfer the material or to ensure its continued safekeeping. Moreover, Commission representatives have been unable to determine the licensee's intended actions with respect to its license and the radioactive material. In these circumstances, there is no assurance that the licensee will conduct its activities in accordance with the Commission's requirements. Therefore, I have determined that the licensee should show cause why License No. 13-11822-01 should not be revoked. In view of the foregoing circumstances surrounding the licensee's apparent abandonment of the material and its business premises, I have also determined that the public health, safety, and interest require an immediate suspension of License No. 13-11822-01 and transfer of the material to an authorized recipient within 5 days of issuance of this Order.

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:

A. Effective immediately, License No. 13-11822-01 is suspended pending further order, and the licensee shall cease and desist from any use of byproduct material in its possession and from any further acquisition or receipt of byproduct material;

B. Within 5 days of the issuance of this Order the licensee shall transfer or permit the transfer of all radioactive material within its possession to a person authorized to possess such material; and

C. The licensee shall show cause, as provided in Section IV below, why License No. 13-11822-01 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.C. 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. 13-11822-01.

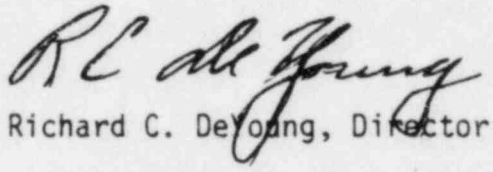
V

The licensee may request a hearing on this Order within 25 days after the issuance of this Order. Any answer to the Order or request for a hearing shall be submitted to the Director, Office of Inspection and Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555. A copy shall also be sent to the

Executive Legal Director at the same address. A REQUEST FOR A HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF SECTIONS III.A and III.B OF THIS ORDER.

If the licensee requests a hearing on 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, on the basis of the matters set forth in Section II of this Order, License No. 13-11822-01 should be revoked.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 22 day of July 1982

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

OCT 14 1982

License No. 13-11822-01
EA 82-94

Midstate Testing Laboratory, Inc.
ATTN: Mr. Richard J. Mason
President
7943 New Jersey Avenue
Hammond, Indiana 46323

Dear Mr. Mason:

On July 22, 1982, NRC issued an Order to show cause why your license should not be revoked. The Order also suspended your license effective immediately and required you to transfer within 5 days all licensed material to a person authorized to receive it. Since you did not transfer your licensed material within the required 5 days, the licensed material was removed on July 30, 1982, from your abandoned business premises with the permission of your landlord, and disposed of in an authorized manner. 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 an answer within the specified 25 days that would provide a basis for refraining from revocation of your license on the grounds set forth in the July 22, 1982 Order, License No. 13-11822-01 is revoked.

Sincerely,

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure: Order Revoking License

cc: Virgil J. Konopinski, Director
Indiana State Board of Health

Richard J. Mason
321 No. Colorado St.
Hobart, IN 46343

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
MIDSTATE TESTING LABORATORY, INC.	)	Byproduct Material License
7943 New Jersey Avenue	)	No. 13-11822-01
Hammond, Indiana 46323	)	EA 82-94

ORDER REVOKING LICENSE

I

Midstate Testing Laboratory, Inc., (the "licensee") is the holder of Byproduct Material License No. 13-11822-01 (the "license") issued by the Nuclear Regulatory Commission (the "Commission"). The license authorizes the licensee to possess and use byproduct material in the performance of radiographic operations under conditions specified in the license and the Commission's regulations. The license has an expiration date of February 29, 1984.

II

By Order dated July 22, 1982 (47 FR 33028), the license was suspended, effective immediately, and the licensee was given an opportunity to show cause why the license should not be revoked. As described in that Order, the Commission took these actions on the basis of the licensee's apparent abandonment of its business premises and the radioactive material located therein. The licensee had made no apparent arrangements to transfer the material or ensure its safekeeping, and

the Region III office was unable, despite numerous attempts, to contact the licensee's president regarding the licensee's intentions.

In accordance with the Order, the licensee was required within 5 days of the issuance of the Order to transfer or permit the transfer of all radioactive material within its possession to a person authorized to possess such material. The licensee took no action within 5 days of the issuance of the Order. Consequently, the licensed byproduct material was removed by NRC Region III representatives from the licensee's abandoned business premises with the permission of the landlord and was disposed of in an authorized manner.

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. Although the licensee's president indicated to NRC Region III by telephone on August 11, 1982, that he would submit a response to the Order, the licensee has not filed an answer to the Order. Because the circumstances described in the Order dated July 22, 1982, 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. 13-11822-01.

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. 13-11822-01 is revoked.

This Order is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

RC DeYoung

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 14 day of October 1982

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

SEP 3 1982

License No. General License
(10 CFR 40.22)
EA 82-111

Orion Chemical Company
ATTN: Mr. John Larson
3853 North Sherwood Drive
Provo, Utah 84604

Gentlemen:

Subject: Order To Show Cause and Order Temporarily Suspending License (Effective Immediately)

Enclosed herewith is an Order, effective immediately, suspending your general license and directing you to show cause why your general 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,

R C DeYoung

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Order To Show Cause and
Order Temporarily Suspending
License (Effective Immediately)

cc: Utah Department of Health
Bureau of Radiation and
Occupational Health

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of Orion Chemical Company 3853 North Sherwood Drive Provo, Utah 84604	)	General License (10 CFR 40.22)

ORDER TO SHOW CAUSE AND ORDER TEMPORARILY SUSPENDING LICENSE

(EFFECTIVE IMMEDIATELY)

I.

Orion Chemical Company, 3853 North Sherwood Drive, Provo, Utah 84604 (the "licensee") is the holder of a general license granted by the Nuclear Regulatory Commission (the "Commission") pursuant to 10 CFR 40.22. The general license authorizes the use or transfer of not more than 15 pounds of source material at one time and the receipt of not more than 150 pounds of source material in any one calendar year.

II.

The results of an inspection of the licensee's premises at Orem, Utah, conducted on August 23, 1982 by a representative of the NRC Region IV Office, indicated that the licensee had conducted licensed activities in violation of Commission requirements as enumerated below:

1. 10 CFR 40.22(a) grants a general license authorizing commercial and industrial firms to use and transfer not more than 15 pounds of source material at one time.

   Contrary to this authorization, the licensee had more than 15 pounds of source material at one time during August 1982.

2. 10 CFR 40.62(b) requires each licensee to make available to the Commission for inspection, upon reasonable notice, records of transfer of licensed material kept pursuant to the regulations in Title 10, Code of Federal Regulations.

   Contrary to this requirement, on August 23, 1982, the licensee refused to make available to an NRC inspector those records of transfer of source material that 10 CFR 40.61(a) requires to be maintained.

3. 10 CFR 40.22 grants a general license authorizing commercial and industrial firms to use and transfer small quantities of source material. Disposal of source material is to be made by transfer pursuant to 10 CFR 40.51.

   Contrary to those requirements, the inspector observed contamination in areas outside of the licensee's business premises that apparently resulted from unauthorized disposal of compounds containing depleted uranium.

4. 10 CFR 40.61(a) requires, in part, that each person who receives source material shall keep records showing the receipt of such material.

Contrary to this requirement, such records of receipt were incomplete at the time of the inspection on August 23, 1982.

III.

The violations enumerated in section II of this Order indicate a careless disregard by the licensee of Commission requirements. Violations 3 and 4 were identified during a previous inspection on November 2, 1979, and were the subject of a Notice of Violation dated July 22, 1980. These earlier violations were also discussed between the licensee and Mr. Jerry Everett of NRC Region IV Office on December 11, 1979, at which time the licensee agreed to cease unauthorized disposal and to decontaminate areas outside of the licensee's laboratory within 30 days. In further discussion on July 17, 1980 between the licensee and Mr. W. E. Vetter of the NRC Region IV Office, the licensee reaffirmed its commitment to cease unauthorized disposal of source material and agreed to decontaminate an area adjacent to the licensee's facility and to ensure maintenance of required records. Despite these commitments the violation recurred.

Moreover, the licensee's handling of more than 15 pounds of source material at any one time and the licensee's refusal to honor an NRC inspector's reasonable request for inspection of records required to be kept by the NRC also reflect

the licensee's careless disregard for compliance with NRC requirements. Accordingly, the Director of the Office of Inspection and Enforcement has determined pursuant to 10 CFR 2.202(f) that, in view of the willful nature of the licensee's violations, the licensee's authorization to receive and use source material under the general license should be suspended, effective immediately, pending further order.

IV.

In view of the foregoing, pursuant to section 62, 63, 161b, and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 40, IT IS HEREBY ORDERED THAT:

A. Effective immediately, the licensee shall not receive or use source material, except as permitted in Condition B below;

B. Effective immediately, the licensee shall place all source material in its possession in locked storage or transfer such material to a person authorized to receive the material;

C. Effective immediately, the licensee shall make available within 24 hours of receipt of this order all records required to be kept in accordance with the general license for inspection by NRC inspectors; and

D. The licensee shall show cause, in the manner hereinafter provided, why its authorization under the general license in 10 CFR Part 40 to receive and use source material should not remain permanently suspended.

V.

The Licensee may, within twenty-five days of the date of this Order, show cause by filing a written answer to this Order under oath or affirmation. The licensee may also request a hearing within the said twenty-five day period. Any answer to this order or request for a hearing shall be addressed to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555. A copy of the answer or request for hearing shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555. Any answer to this Order shall specifically admit or deny each alleged violation described in Section II above, and may set forth the matters of fact and law upon which the licensee relies. If a hearing is requested, the Commission will issue an order designating the time and place of hearing. AN ANSWER OR REQUEST FOR HEARING SHALL NOT STAY THE TEMPORARY EFFECTIVENESS OF THIS ORDER.

In the event a hearing is held, the issues to be considered at such a hearing shall be:

A. Whether the licensee was in violation of the Commission's regulations and the conditions of its general license as specified in section II, and

B. Whether the Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 3 day of September 1982

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

OCT 25 1982

License No. General License
(10 CFR 40.22)
EA 82-111

Orion Chemical Company
ATTN: Mr. John P. Larsen
3853 North Sherwood Drive
Provo, Utah 84604

Dear Mr. Larsen:

Subject: Order Rescinding Order to Show Cause and Order Temporarily Suspending License

We have reviewed your response to the Order to Show Cause and Order Temporarily Suspending License dated September 3, 1982. In your response, you describe a number of corrective actions you plan to take including: 1) measures to assure compliance with recordkeeping requirements and to permit inspection of records by representatives of the Commission; 2) improvements in the conduct of operations including the use of protective clothing, and frequent instrument and service monitoring, and 3) the use of containers at each step of the process to prevent spills and contamination. In addition, in discussions with NRC personnel, you have committed to the use of a hood at each step of the process and to conduct all future operations in accordance with the recommendations of a consultant, Mr. Bob Decker of Chemrand Corporation.

In view of these representations and commitments, on October 23, 1982, the Director of Inspection and Enforcement signed the enclosed Order rescinding the Order to Show Cause and Order Temporarily Suspending License.

You should be aware, however, that the NRC is considering imposing a civil penalty on you for the violations that gave rise to the show cause Order. Should the agency decide that a civil penalty should be imposed, the Regional Administrator, Region IV, will issue a Notice of Violation proposing a penalty to which you will be given the opportunity to respond.

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,

R C DeYoung

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure: Order Rescinding Order
to Show Cause and Order Temporarily
Suspending License

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	General License
Orion Chemical Company	)	(10 CFR 40.22)
3853 North Sherwood Drive	)	EA 82-111
Provo, Utah 84604	)	

ORDER

I

Orion Chemical Company, 3853 North Sherwood Drive, Provo, Utah 84604 (the "licensee") is the holder of a general license granted by the Nuclear Regulatory Commission (the "Commission") pursuant to 10 CFR 40.22. The general license authorizes the use or transfer of not more than 15 pounds of source material at one time and the receipt of not more than 150 pounds of source material in any one calendar year.

II

An inspection of the licensee's premises at Orem, Utah, on August 23, 1982, by a representative of the NRC Region IV Office indicated that the licensee had conducted licensed activities in violation of certain Commission requirements. As a result of this inspection, an Order to Show Cause and Order Temporarily Suspending License was issued to Orion Chemical Co. on September 3, 1982. The licensee responded to the citations in the Order to Show Cause on September 24, 1982, and described a number of corrective actions it planned to take including: (1) measures to assure compliance with recordkeeping requirements and to permit inspection of records by representatives of the Commission, (2) improvements in the conduct of operations including the use

of protective clothing, frequent instrument and service monitoring, and (3) the use of containers at each step of the process to prevent spills and contamination. In discussions with NRC personnel, the licensee has also committed to the use of a hood at each step of the process and to conduct all future operations in accordance with the recommendations of a consultant, Mr. Bob Decker of Chemrand Corporation. In addition, the licensee committed to meet all state and local regulations.

In view of these representations and commitments, the Director of the Inspection and Enforcement has determined that rescission of the September 3, 1982 Order is appropriate.

III.

Accordingly, the licensee may resume operations in accordance with the requirements of the general license, issued under 10 C.F.R. 40.22 of the Commission's regulations.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard C. DeYoung, Director
Office of Inspection & Enforcement

Dated at Bethesda, Maryland
this 22nd day of October, 1982.

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

AUG 27 1982

License No. 41-19870
EA 82-105

Radiodiagnostic Imaging
Affiliates of Virginia, Inc.
ATTN: Mr. Charles C. Self
2500 21st Avenue South
Nashville, TN 37212

Gentlemen:

Subject: Order To Show Cause and Order Modifying License
(Effective Immediately)

Enclosed herewith is an Order, effective immediately, modifying your license to reflect the commitments in your letter of August 24, 1982 and in a telephone conversation on August 24, 1982 with John Olshinski of NRC and an Order directing you 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 H. Sniezek/fn

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Order To Show Cause and
Order Modifying License
(Effective Immediately)

cc: M. H. Mobley, Director
Division of Radiological Health
Tennessee Department of Public Health

C. R. Price, Supervisor
Bureau of Radiological Health
Virginia Department of Health

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Radiodiagnostic Imaging	)	Byproduct Material
Affiliates of Virginia, Inc.	)	License No. 41-19870-01
2500 21st Avenue, South	)	EA 82-105
Nashville, TN 37212	)	

ORDER TO SHOW CAUSE AND ORDER MODIFYING LICENSE
(EFFECTIVE IMMEDIATELY)

I

Radiodiagnostic Imaging Affiliates of Virginia, Inc., 2500 21st Avenue South, Nashville, TN 37212 (the "Licensee") is the holder of Byproduct Material License No. 41-19870-01 (the "License") issued by the Nuclear Regulatory Commission (the "Commission"). The License authorizes the possession of byproduct material and its use for medical diagnostic purposes. The License was originally issued on February 26, 1982 and the present expiration date of the License is February 28, 1987.

II

Following a routine inspection on August 12, 1982, an investigation of licensee activities to determine compliance with Commission requirements was conducted by representatives of the NRC Region II (Atlanta, GA) Office on August 17 and 18, 1982. The results of this investigation indicated that the Licensee conducted licensed activities in violation of Commission requirements from April 1982 to August 1982 as enumerated below:

1. License Condition 17 requires that licensed material be used in accordance with statements, representations, and procedures contained in letters dated September 21, 1981, January 8, 1982, and February 17, 1982. One such procedure requires that a survey meter be available for use, with technical specifications including a thin wall detector, a minimum detection range of from 0 to 0.2 mrem/hr, and a maximum detection range of from 100 to 2000 mrem/hr.

   Contrary to the above, a survey meter has not been available for use since April 9, 1982, the day on which licensed operations commenced. This resulted in the following specific violations of six required procedures contained in the application and appurtenant letters:

   a. Although procedures required daily surveys of elution, preparation, and injection areas, such surveys had not been performed.

   b. Although procedures required a daily survey of the trunk in the car used to transport radiopharmaceuticals, such surveys had not been performed.

   c. Although procedures required surveys of the radioactive materials transport box to determine proper labelling, such surveys had not been performed.

d. Although procedures required surveys of incoming and outgoing packages of radioactive material, such surveys had not been performed.

e. Although procedures required weekly wipe tests of the "hot" laboratory area, such surveys had not been performed.

f. Although procedures required that waste being held for decay and subsequent disposal be surveyed with a low level survey meter before disposal, such surveys had not been performed.

2. 10 CFR 35.14(b)(4)(ii) requires that each elution or extraction of technetium-99m from a molybdenum-99/technetium-99m generator before administration to the patient be tested to determine either the total molybdenum-99 activity or the concentration of molybdenum-99.

Contrary to the above, these tests for the presence of molybdenum-99 in the generator elution had not been performed since June 10, 1982.

3. License Condition 12 requires that licensed material shall be used by the individuals named therein.

Contrary to the above, licensed material had been used by a Certified Nuclear Medicine Technologist not named in the license condition, in that he had administered the doses to the patients routinely since April 9, 1982.

4. License Condition 17 requires that licensed material be used in accordance with statements, representations, and procedures contained in letters dated September 21, 1981, January 8, 1982, and February 17, 1982. One representation includes a diagram of the nuclear medicine "hot" laboratory facility located at 314 Wood Avenue East, Big Stone Gap, VA 24219, which illustrates xenon storage locations, supply-air vent location, and adjacent unrestricted areas.

   Contrary to the above, individual xenon vials were not stored at the exhaust vent as indicated, no supply air vent was located in the door as indicated, and the hot lab was on an inside wall instead of an outside wall as indicated in the diagram. As a result, a private residence was adjacent to the hot lab.

5. License Condition 17 requires that licensed material be used in accordance with statements, representations, and procedures contained in letters dated September 21, 1981, January 8, 1982, and February 17, 1982. One procedure requires daily constancy checks on the dose calibrator using at least two reference sources with varying energies and activities.

   Contrary to the above, the daily constancy checks on the dose calibrator had not been performed since April 9, 1982.

6. 10 CFR 71.56(a) requires that licensed material be packaged and labelled in accordance with applicable regulations of the Department of Transportation in 49 CFR Parts 170 through 189. These regulations require labelling a package as a radioactive Yellow-III if radiation levels on the surface of the package exceed 50 mrem/hr.

   Contrary to the above, on the date of inspection, a package containing a spent molybdenum-99/technetium-99m generator which exhibited radiation levels on one surface in excess of 68 mrem/hr, did not have a Yellow-III label and was mislabelled as Yellow-II, erroneously indicating that radiation levels were less than 50 mrem/hr.

7. 10 CFR 20.105(b) requires that no licensee shall possess or use licensed material in such a manner as to create in any unrestricted area radiation levels which, if any individual were continuously exposed, could result in his receiving a dose in excess of 2 millirem in any one hour or 100 millirem in any seven consecutive days.

   Contrary to the above, on the date of the inspection, radiation levels of 1.2 mr/hr were measured at one foot from the exterior wall of the hot lab within an adjacent unrestricted conference room. This radiation level could result in a dose in excess of 100 millirem in any seven consecutive days.

4. All surveys, constancy checks and Mo-99 breakthrough checks as outlined in the Confirmation of Action Letter of August 17, 1982 had been performed.

5. All hospitals served have been surveyed.

6. Shiv Navani, M.D. and Mrs. Eric Hyde have been appointed to the Board of Directors of R.I.A. of Virginia, Inc.

7. Subhash Saha, M.D. has been named Radiation Safety Officer for R.I.A. of Virginia, Inc. A license amendment request to reflect this has been submitted to the NRC.

8. Lee County Hospital in Pennington Gap, Virginia has agreed to the relocation of the hot lab to an outbuilding presently used for storage purposes.

During a telephone conversation on August 24, 1982 between Mr. Charles Self of R.I.A of Virginia, Inc. and Mr. John Olshinski of NRC, Region II, the licensee provided the following additional commitments:

1. The licensee will insure that the named physician users will administer doses to the patients, until such time as the Materials Licensing Branch, NMSS, NRC, may agree with alternative procedures. However, doses to patients under the care of Tassanee Visisviriyaihai, M.D., may be administered by a technologist in her presence.

2. The licensee will insure that the newly appointed Radiation Safety Officer, Subhash Saha, M.D., will for the next six months perform bi-weekly (every two weeks) audits of compliance with license conditions and NRC rules in Title 10, Code of Federal Regulations, and maintain records of these audits.

These commitments were reflected in a Confirmation of Action Letter issued by James P. O'Reilly, Regional Administrator, Region II on August 25, 1982.

In light of the willful violations of certain requirements since the inception of licensed operations, the NRC remains concerned about the ability of this licensee to conduct its operations in conformance with Commission requirements. Consequently, the Director, Office of Inspection and Enforcement has determined that the licensee should show cause why its license should not be revoked. The Director has also determined that the public health and safety require that continued conduct of licensed activities be in accordance with the licensee commitments specified above and, therefore, these commitments should be imposed by this immediately effective Order.

IV

In view of the foregoing, pursuant to section 161b Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2, 20, 30, and 35, IT IS HEREBY ORDERED THAT:

A. Effective immediately, License No. 41-19870-01 is modified to include the licensee's statements and representations contained in a letter and telephone conversations of August 24, 1982, as specified in Section III above.

B. The Licensee shall show cause, in the manner hereinafter provided, why License No. 41-19870-01 should not be revoked.

V

The licensee may, within twenty-five days of the date of receipt of this Order, show cause as required by Section IV.B by filing a written answer under oath or affirmation setting forth the matters of fact and law upon which the licensee relies. Any answer to this Order which the licensee intends to satisfy the show cause requirement shall set forth the reasons why the licensee believes the NRC should continue to license R.I.A. of Virginia, Inc. in light of its violation of Commission requirements since the beginning of its licensed activities. Upon failure of the licensee to file an answer within the time specified, the Director, Office of Inspection and Enforcement will, without further notice, issue an Order revoking License No. 41-19870-01.

VI

The licensee may request a hearing within twenty-five days of the date of receipt of this Order. Any answer to this Order or any request for a hearing shall be

submitted to the Director of Inspection and Enforcement, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555 with a copy to the Executive Legal Director at the same address. If a hearing is requested by the licensee, the Commission will issue an Order designating the time and place of any such hearing. Any request for a hearing shall not stay the immediate effectiveness of this Order.

VII

In the event a hearing is held, the issues to be considered at such a hearing shall be:

whether on the basis of the matters set forth in Sections II and III of this Order, License No. 41-19870-01 should be modified as set forth in Section IV above.

FOR THE NUCLEAR REGULATORY COMMISSION

James H Sniezek/fr

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 17th day of August 1982

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

OCT 26 1982

License No. 41-19870-01
EA 82-105

Radiodiagnostic Imaging
Affiliates of Virginia, Inc.
ATTN: Mr. Charles C. Self
2500 21st Avenue South
Nashville, TN 37212

Gentlemen:

Subject: Decision On Order To Show Cause and Order Further Modifying License (Effective Immediately)

This is in reply to your September 17, 1982 letter which responded to the Order to Show Cause and Order Modifying License dated August 17, 1982.

After careful consideration of your response, the results of an inspection on September 16, 1982, and supporting statements from three hospitals, the Director, Office of Inspection and Enforcement has determined that adequate cause has been shown and, therefore, your license will not be revoked. This decision is based upon the determination that you have made improvements in your programs to comply with license requirements, and that the specific plans, procedures and facility changes, as described in your September 17, 1982 letter, if continued or implemented as described, are adequate to enable you to conduct future activities in compliance with Commission requirements. Therefore, the Director has also determined that an Order, effective immediately, modifying your license to include the statements and representations contained in your letter of September 17, 1982, is required.

If, as a result of future inspections, we observe further violations of license requirements, you will be subject to additional enforcement action.

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.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

OCT 26 1982

Radiodiagnostic Imaging Affiliates - 2 -
of Virginia, Inc.

The accompanying Order 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,

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure: Order Rescinding Order
to Show Cause and Order Further
Modifying License (Effective Immediately)

cc: M. H. Mobley, Director
Division of Radiological Health
Tennessee Department of Public Health

C. R. Price, Supervisor
Bureau of Radiological Health
Virginia Department of Health

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of Radiodiagnostic Imaging Affiliates of Virginia, Inc. 2500 21st Avenue South Nashville, TN 37212	)	Byproduct Material License No. 41-19870-01 EA 82-105

DECISION ON ORDER TO SHOW CAUSE DATED AUGUST 27, 1982
AND
ORDER FURTHER MODIFYING LICENSE
(EFFECTIVE IMMEDIATELY)

I

Radiodiagnostic Imaging Affiliates of Virginia, Inc., 2500 21st Avenue South, Nashville, TN 37212 (the "Licensee") is the holder of Byproduct Material License No. 41-19870-01 (the "License") issued by the Nuclear Regulatory Commission (the "Commission"). The License authorizes the possession of byproduct material and its use for medical diagnostic purposes. The License was originally issued on February 26, 1982, and the present expiration date of the License is February 28, 1987.

II

Following a routine inspection on August 12, 1982, an investigation of Licensee activities was conducted by representatives of the NRC Region II (Atlanta, GA) Office on August 17 and 18, 1982, to determine compliance with Commission requirements. As a result of this investigation, an Order to Show Cause Why the License Should Not Be Revoked and an Order Modifying License, dated August 27, 1982, were issued by the Director, Office of Inspection and Enforcement.

The Licensee responded by filing a written answer to the Order to Show Cause on September 17, 1982. The licensee responded to each of the items of non-compliance cited in the Order and set forth the corrective actions taken. The licensee also described additional steps taken to improve its activities including obtaining a generator shield to store depleted generators until shipment and obtaining additional shielding for xenon storage. On the basis of an evaluation of the licensee's response, the results of an inspection conducted on September 16, 1982, and supporting statements from three hospitals, the Director, Office of Inspection and Enforcement, has determined that the specific plans, procedures and facility changes, if continued or implemented as described by the licensee, are adequate to enable the licensee to conduct future activities involving licensed material in compliance with Commission requirements. The Director has further determined that the public health, safety and interest requires that these additional commitments be made requirements by an immediately effective Order.

III

In view of the foregoing, pursuant to Section 161(b) of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2, 20, 30, and 35, IT IS HEREBY ORDERED EFFECTIVE IMMEDIATELY THAT:

A. License No. 41-19870-01 is modified to include the Licensee's statements and representations contained in the letter of September 17, 1982, as specified in Section II above.

B. The Licensee shall, beginning in the fourth quarter of 1982 and continuing through the fourth quarter of 1983, conduct internal compliance audits on a quarterly frequency to be performed by an independent consultant possessing certification or eligibility for certification by the American Board of Health Physics, American Board of Radiology in Radiological Physics or Medical Nuclear Physics, or the American Board of Nuclear Medicine Services. These audits shall be documented and maintained on file at the Licensee's Big Stone Gap Facility. Once these independent audits have commenced, the bi-weekly audits by the Radiation Safety Officer, required by the Order of August 27, 1982, may be discontinued.

IV

The Licensee may request a hearing on this Order within 25 days of its issuance. A request for hearing shall be submitted to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Copies of the request shall also be sent to the Secretary of the Commission and the Executive Legal Director at the same address. If a hearing is requested by the Licensee, the Commission will issue an Order designating the time and place of any such hearing. If a hearing is held, the issue to be considered at such hearing shall be:

Whether, on the basis of the matters set forth in Section II of this Order, License No. 41-19870-01 should be modified as set forth in Section III of this Order.

In the event that a need for further action becomes apparent, either in the course of proceedings on this Order, or any other time, the Director will take appropriate action.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
This 26 day of October 1982

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

NOV 24 1982

License No. 34-02176-01
EA 82-125

St. Elizabeth Medical Center
ATTN: Thomas A. Beckett
Chief Executive Officer
601 Miami Boulevard, West
Dayton, OH 45408

Gentlemen:

This refers to a special safety inspection conducted by Ms. E. Matson, Ms. P. Whiston, and Mr. J. R. Mullauer of our staff on September 30 and October 1, 1982, of activities authorized by NRC Byproduct Material License No. 34-02176-01. The results of the inspection were discussed on October 14, 1982, during an enforcement conference in the Region III Office between you, Mr. J. Belanich, Ms. R. M. Suerdieck, and Mr. D. Young of your staff and Mr. A. B. Davis and others of the NRC staff.

The inspection showed, among other things, that the licensee's management failed to assure that licensed radioactive material was used according to proper radiation protection procedures and that licensed radioactive material in storage was secured as required. We are specifically concerned that hospital employees and members of the general public were permitted to enter a restricted area where sealed sources were stored and not secured from unauthorized removal during an open house on June 6, 1982.

We are also concerned that the duties and responsibilities of the Radiation Safety Officer (RSO) have been assigned to several individuals, and the violations identified during this inspection indicate to us that these duties have not been carried out in an organized or comprehensive manner. We believe this is a major contributing cause of the weakness in your radiation safety program management. Therefore, in your response to this letter, please describe what actions you will take to define the duties and responsibilities of the RSO and what steps management will take to assure that these duties and responsibilities are carried out.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

To emphasize the importance of this matter and the need to ensure implementation of effective management control over your licensed program, we propose to impose civil penalties for the items set forth in the Notice of Violation which is enclosed with this letter. The violations in the Notice have been categorized at the severity levels described in the NRC Enforcement Policy published in the Federal Register, 47 FR 9987 (March 9, 1982). The base value for each of the two Severity Level III violations is $2,000. The failure to report the loss or theft of licensed radioactive material on a timely basis has the same significance as the lack of control which resulted in the loss or theft. After consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of a Civil Penalty in the cumulative amount of Four Thousand Dollars.

You are required to respond to this letter and should follow the instructions in the Notice when preparing your response. You should give particular attention to those actions that will be taken by management to ensure compliance with NRC requirements. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

In accordance with 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 Penalties

cc w/encl:
DMB/Document Control Desk (RIDS)

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

St. Elizabeth Medical Center
601 Miami Boulevard, West
Dayton, Ohio 45408

License No. 34-02176-01
EA 82-125

As a result of a special safety inspection conducted on September 30 and October 1, 1982, it appears that the licensee failed to properly secure licensed material from unauthorized removal and failed to immediately report to the NRC Regional Office the loss or theft of 57 millicuries of iridium-192 sources (seeds) after the occurrence became known on or about July 9, 1982.

In order to emphasize the importance of this matter and the need to assure implementation of effective management control over your licensed program, NRC proposes to impose civil penalties in the cumulative amount of Four Thousand Dollars. 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 associated civil penalties are set forth in Section I below:

I. CIVIL PENALTY VIOLATIONS

A. License Condition No. 20 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in certain referenced applications and letters.

The referenced letter dated January 28, 1980, states in the section entitled "Facilities and Equipment" that, "Sources are to be stored in a lead safe (key locked) in the corner of the cobalt-60 therapy room."

Contrary to the above, during the period June 5, 1982 to September 29, 1982 millicurie quantities of iridium-192 seeds were stored in unlocked containers in an unlocked therapy room. During this period 48 seeds (57 millicuries) of iridium-192 were either lost or stolen.

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

(Civil Penalty - $2,000)

B. 10 CFR 20.402(a) requires that each licensee shall report by telephone to the Director of the appropriate Nuclear Regulatory Commission Regional Office, immediately after its occurrence becomes known to the licensee, any loss or theft of licensed material in such quantities and under such circumstances that it appears to the licensee that a substantial hazard may result to persons in unrestricted areas.

10 CFR 20.402(b) requires that each licensee who is required to make a report pursuant to Paragraph (a) of this section shall within thirty (30) days after he learns of the loss or theft, make a report in writing to the appropriate NRC Regional Office with copies to the Director of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C.

Contrary to the above:

1. The licensee did not report to the NRC the loss or theft of 48 iridium-192 seeds (5[illegible] millicuries) until September 27, 1982, although the loss was apparent to the licensee on or about July 9, 1982. The radioactivity of the seeds is such that a substantial hazard could result to persons in unrestricted areas.

2. A written report was not submitted to the appropriate NRC Regional Office within 30 days after the licensee learned of the loss or theft.

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

(Civil Penalty - $2,000).

II. VIOLATIONS NOT ASSESSED CIVIL PENALTIES

A. 10 CFR 35.14(b)(5)(vii) requires that patients treated with cobalt-60, cesium-137 or iridium-192 implants remain hospitalized until a source count and a radiation survey of the patients confirm that all implants have been removed.

Contrary to the above:

1. A patient treated with iridium-192 implants was released from the hospital on June 6, 1982, and neither a source count nor the required radiation survey was performed.

2. Patients treated with cesium-137 implants were released from the hospital on March 11, 1982; April 19, 1982; and May 6, 1982 and the required radiation surveys were not conducted.

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

B. 10 CFR 35.14(b)(5)(v) requires that any licensee who possesses and uses Group VI sources or devices containing byproduct material conduct a quarterly physical inventory to account for all sources and devices received and possessed.

Contrary to the above, quarterly physical inventories have not been conducted of Group VI sealed sources received and possessed. Specifically, cesium-137 sealed sources received in February 1982 and iridium-192 sources received in May 1982 have not been inventoried.

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

C. License Condition No. 20 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in certain referenced applications and letters.

The referenced letter dated June 6, 1980, states that ring badges will be used for determining the radiation doses to the extremities of personnel handling sealed sources.

In addition, the referenced letter dated January 28, 1980, states that, "Nurses caring for brachytherapy patients will be assigned film badges. TLD finger badges will also be assigned to nurses who must provide external personal care to the patient."

Contrary to the above, three individuals who handle brachytherapy sealed sources have not been assigned ring badges. In addition, nurses caring for brachytherapy patients on the oncology ward have not been assigned film badges.

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

D. License Condition No. 20 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in certain referenced applications and letters.

The referenced letter dated January 28, 1980, states in Item 7, "Procedures for Use of Group VI Sources for Treatment of Patients," that at the conclusion of treatment, a survey will be performed to ensure that no sources remain in the patient's room or in any other areas occupied by the patient.

Contrary to the above:

1. An iridium-192 treatment was concluded on June 5, 1982; however, a room survey was not conducted until June 7, 1982.

2. Room surveys were not, in all cases, conducted at the conclusion of cesium-137 treatments. Specifically, room surveys were not conducted after the conclusion of cesium-137 treatments on March 11, 1982; April 19, 1982; and May 6, 1982.

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

E. License Condition No. 20 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in certain referenced applications and letters.

The referenced application dated March 31, 1978, states in Item 12, "Personnel Training Program," that, "All new personnel will receive proper instructions (to include one hour of lecture and one hour of experience) in the following items:

a. Acquaintance with areas where radioactive material is used or stored.
b. Potential hazards associated with radioactive material.
c. Safety procedures associated with their respective duties.
d. Pertinent Nuclear Regulatory Commission Regulations.
e. Rules and regulations of the NRC license.
f. The employee's obligation to report unsafe conditions.
g. Appropriate response to emergencies or unsafe conditions.
h. The employee's right to be informed of their radiation exposure.

These items will be discussed with the employees before they assume their duties with or in the vicinity of radioactive material and whenever there is a significant change in duties, regulations, or terms of the license." All employees will be given an annual refresher course.

Contrary to the above, some of the nursing personnel attending brachytherapy implant patients on the oncology ward have not been given the initial and annual training described above. In addition, housekeeping personnel routinely cleaning these patients' rooms during treatment have received neither the initial training nor an annual refresher course.

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

F. 10 CFR 71.5(a) requires that no licensee shall transport any licensed material outside of the confines of his plant or other place of use unless the licensee complies with the applicable regulations of the Department of Transportation in 49 CFR Parts 170-189.

1. 49 CFR 172.203(d)(v) requires that the shipping papers for shipping radioactive materials must include the transport index assigned to each package bearing Radioactive Yellow-III labels.

   49 CFR 173.389(i)(1) defines transport index as the highest dose rate in millirem per hour at three feet from any accessible external surface of the package.

   Contrary to the above, shipping papers did not include the transport index for a shipment of 198 millicuries of iridium-192, bearing a radioactive Yellow-III label, that the licensee made on September 14, 1982.

2. 49 CFR 173.393(n)(9) requires that prior to each shipment of any package, the shipper shall insure by examination or appropriate test that external radiation and contamination levels are within the allowable limits. The limits for radiation dose rates at any point on the external surface of the package and the allowable surface contamination levels are specified in 49 CFR 173.393(i) and 49 CFR 173.397, respectively.

   Contrary to the above, the licensee (shipper) did not insure by examination or appropriate tests and surveys that contamination

levels and radiation dose rates were within the allowable limits on a package containing 198 millicuries of iridium-192 that was shipped to the manufacturer on September 14, 1982.

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

Pursuant to the provisions of 10 CFR 2.201, St. Elizabeth Medical Center is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, and a copy to the Regional Administrator, USNRC, Region 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. 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, St. Elizabeth Medical Center may pay the civil penalties in the cumulative amount of Four Thousand Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should St. Elizabeth Medical Center 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 St. Elizabeth Medical Center elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer may: (1) deny the violations listed in this Notice in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties. In requesting mitigation of the proposed penalties, the five factors contained in Section IV(B) of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. St. Elizabeth Medical 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, 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

James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 24 day of November 1982

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This compilation summarizes significant enforcement actions that have been resolved during one quarterly period (October - December 1982) and includes copies of letters, notices, and orders sent by the Nuclear Regulatory Commission to the licensee with respect to the enforcement action. 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. This publication is issued on a quarterly basis to include significant enforcement actions resolved during the preceding quarter.

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