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Enforcement Actions: Significant Actions Resolved

Quarterly Progress Report
July - September 1984

U.S. Nuclear Regulatory Commission

Office of Inspection and Enforcement

iE Enforcement Staff

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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 (July - September 1984) and includes copies of letters, Notices, and Orders sent by the Nuclear Regulatory Commission to licensees with respect to these enforcement actions and the licensees' responses. It is anticipated that the information in this publication will be widely disseminated to managers and employees engaged in activities licensed by the NRC, in the interest of promoting public health and safety as well as common defense and security.

CONTENTS

ENFORCEMENT ACTIONS: SIGNIFICANT ACTIONS RESOLVED

July - September 1984

INTRODUCTION

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

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

A brief summary of each significant enforcement action that has been resolved in the third quarter of 1984 can be found in the section of this report entitled, "Summaries." Each summary provides the enforcement action number (EA) to identify the case for reference purposes. The supplement number refers to the activity area in which the violations are classified according to guidance furnished in the U.S. Nuclear Regulatory Commission's "General Statement of Policy and Procedure for Enforcement Actions," published in the Federal Register, 47 FR 9987 (March 9, 1982) and recently revised 49 FR 8583 (March 8, 1984). Five levels of severity for each violation show their relative importance within each of the following activity areas:

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

Part I.A of this report is comprised of copies of completed civil penalty or order actions involving reactor licensees, arranged alphabetically. Part I.B includes copies of Notices of Violations that have been issued to reactor licensees for Severity Level III violations but for which no civil penalty was assessed. Part II.A contains civil penalty or order actions involving materials licensees and Part II.B includes copies of Notices of Violations that have been issued to materials licensees for Severity Level III violations but for which no civil penalty was assessed. The licensees' responses are also included in Parts I.A and II.A.

Actions still pending on September 30, 1984, will be included in future issues of this publication when they have been resolved.

SUMMARIES

I. REACTOR LICENSEES

A. Civil Penalties and Orders

Carolina Power and Light Company, Raleigh, North Carolina
(H. B. Robinson Steam Electric Plant, Unit 2) EA 84-13, Supplement IV

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $30,000 was issued on March 13, 1984 based on a failure to follow procedures that implement the licensee's technical specifications for entry into a locked high radiation area. As a result of this failure, a worker entered the reactor sump area at a time when the retractable incore detector thimbles were withdrawn and the sump was classified as a locked high radiation area. Had the worker stayed longer than he did (about 1/2 minute), he could have exceeded the dose limits for exposure. The licensee responded on May 23 and June 15, 1984. After reviewing the responses, considering the actions that the licensee took including reporting the event immediately, promptly investigating the event, and implementing a long range improvement program, and after visiting the plant site the Director, Office of Inspection and Enforcement, mitigated completely the civil penalty on August 28, 1984.

Florida Power and Light Company, Juno Beach, Florida
(Turkey Point Nuclear Plant, Units 3 and 4) EA 84-41, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $150,000 was issued on July 20, 1984 based on three Severity Level III violations. The violations involved (1) inoperability of the auxiliary feedwater system, (2) numerous examples of failures to follow procedures, and (3) failure to conduct an adequate review of a design change that led to the degradation of electrical equipment. The licensee responded and paid the civil penalties on August 20, 1984.

Iowa Electric Light and Power Company, Cedar Rapids, Iowa
(Duane Arnold Energy Center) EA 84-09, Supplement III

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $20,000 was issued on March 13, 1984 based on a failure to control access to a vital area. Additional violations were identified for which no civil penalty was assessed. These violations involved (1) failure to adequately protect Safeguards Information, (2) failure to report a condition of degraded security, and (3) failure to maintain the integrity of vital area barriers. The licensee responded on April 12, 1984 and, after reviewing the response, an Order imposing the civil penalty was issued on July 17, 1984. The licensee responded and paid the civil penalty on August 9, 1984.

Pennsylvania Power and Light Company, Allentown, Pennsylvania
(Susquehanna Steam El ctric Station, Units 1 and 2) EA 84-05, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $75,000 was issued on July 6, 1984 based on a violation involving the inoperability of a source range monitor during initial fuel loading and the movement of control rods in the Unit 2 reactor vessel. The Notice also included three violations for Unit 1 which were classified as Severity Level IV. The licensee responded and paid the civil penalty on August 3, 1984.

Philadelphia Electric Company, Philadelphia, Pennsylvania
(Peach Bottom Atomic Power Station, Units 2 and 3) EA 84-39, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty and Order Modifying License was issued on June 18, 1984. The amount of the civil penalty was $30,000 and was based on violations that involved (1) two instances during startups in which the reactor heatup rates exceeded the limits specified in the technical specifications, (2) an unplanned reactor pressurization at a temperature prohibited by the technical specifications, and (3) failure to recognize that a control rod had a scram time greater than that required by the technical specifications. The Order required that a plan be established for the review and appraisal of (1) the licensee's process for performing safety evaluations and reviews of procedures pursuant to 10 CFR 50.59, (2) plant and system operating procedures to verify that existing procedures are consistent with technical specifications, technical specification bases, and certain sections of the Final Safety Analysis Report (FSAR), and (3) the licensee's program for ensuring that employees involved in the review and approval of operating procedures remain cognizant of the licensing bases. The licensee responded and paid the civil penalty on July 18, 1984.

Tennessee Valley Authority, Chattanooga, Tennessee
(Browns Ferry, Units 1, 2, and 3) EA 84-25, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $120,000 was issued on July 20, 1984 based on three Severity Level III violations. The violations involved (1) several failures to promptly identify and correct conditions adverse to quality, (2) failure to make required reports to the NRC, and (3) failure to perform a functional surveillance test as required by plant technical specifications. The licensee responded and paid the civil penalties on August 20, 1984.

Virginia Electric and Power Company, Richmond, Virginia
(Surry Nuclear Station, Units 1 and 2) EA 84-52, Supplement I

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $40,000 was issued on July 30, 1984, based on the failure of the licensee to adequately implement a Service Life Monitoring Program for snubbers. The licensee responded and paid the civil penalty on September 7, 1984.

B. Severity Level III Violations, No Civil Penalty

Consumers Power Company, Jackson, Michigan
(Palisades Nuclear Generating Plant) EA 84-38, Supplement IV

A Notice of Violation was issued on July 11, 1984 based on an unplanned radiation exposure received by a worker during diving operations in the refueling cavity. No civil penalty was proposed for the following reasons: (1) prompt identification and reporting of the event by the licensee, (2) prior good performance in this area, (3) overall improvements made in the licensee's radiation safety program over the last few years, and (4) the belief that this was an isolated event in the light of the significant number of well-controlled entries into high radiation areas made during the current outage.

Nebraska Public Power District, Columbus, Ohio
(Cooper Nuclear Station) EA 84-76, Supplement V

A Notice of Violation was issued on August 15, 1984 based on receipt of a shipment of licensed material at the Nevada low-level waste site. This shipment exceeded the dose rate of 10 millirem per hour at 2 meters from either side of the trailer. A civil penalty was not proposed because the State of Nevada had already proposed a $3,000 penalty to the licensee.

Northeast Nuclear Energy Company/Connecticut Yankee Atomic Power Company, Hartford, Connecticut
(Haddam Neck Plant and Millstone, Unit 1) EA 84-2, Supplement I

Notices of Violation were issued on July 11, 1984 based on the failure at each facility of the post accident sampling system (PASS) to satisfy the specifications of NUREG-0737 as required by Order. A civil penalty was not proposed because of the good prior performance demonstrated at these facilities.

Pacific Gas and Electric Company, San Francisco, California
(Diablo Canyon Nuclear Power Plant, Unit 1) EA 84-88, Supplement VII

A Notice of Violation was issued on September 24, 1984 based on a material false statement made by the licensee in not reporting an Nuclear Services Corporation (NSC) audit made in 1977. A civil penalty was not proposed because the violation was more than 6 years old, and the material false statement did not seem to have affected the Licensing Board's Partial Initial Decision in 1981, and the audit did not identify a significant quality assurance breakdown.

Tennessee Valley Authority, Chattanooga, Tennessee
(Browns Ferry, Units 1, 2, and 3) EA 84-82, Supplement I

A Notice of Violation was issued on September 13, 1984 based on four violations related to an inadequate design review which had been identified by the licensee. A fifth violation of the same type was added by a letter issued on September 21, 1984. Four violations were

the result of an ongoing review being conducted on compliance with 10 CFR 50 Appendix R (fire protection), and one violation was the result of the normal design review process. A civil penalty was not proposed because these violations were licensee-identified and because the licensee had instituted a major effort in the Regulatory Performance Improvement Program.

II. MATERIALS LICENSEES

A. Civil Penalties and Orders

Caribe Shell and Tube, Inc., Ponce, Puerto Rico
EA 84-56, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $1,000 was issued on June 26, 1984 based on violations found in the licensee's radiation safety program relating to surveys, surveillance of operations, securing sealed sources after use, maintenance of film badges and dosimeters, and posting of high radiation areas. The licensee responded and paid the civil penalty on July 23, 1984.

International Wireline Service, Newton, Illinois
EA 84-62, Supplements IV, V, and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $500 was issued on July 3, 1984 based on violations that represented a significant breakdown in management oversight and control of the licensee's radiation safety program. These violations involved (1) failure to block, brace and/or secure radioactive packages during transportation, (2) failure to prepare shipping papers, (3) failure to label a radioactive material package, (4) failure to post a radiation area; (5) failure to perform leak tests, (6) permitting unauthorized employees to use licensed material, (7) operating without a Radiation Safety Officer, and (8) storing licensed material in an unauthorized source storage area. The licensee responded and paid the civil penalties on July 18, 1984.

Kraft, Incorporated, Glenview, Illinois
EA 84-74, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $500 was issued on August 28, 1984 based on violations involving (1) storage of a 450 millicurie cesium-137 sealed source contained in a density gauge in an unrestricted area and its removal from storage by unauthorized individuals, (2) failure to monitor laboratory areas, and (3) use of radioactive material without the approval of the Radiation Safety Committee. The licensee responded and paid the civil penalties on September 17, 1984.

Mid-States Logging and Perforating Co., Fairfield, Illinois
EA 84-61, Supplements IV, V, and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $500 was issued on July 10, 1984, based on violations

that involved (1) licensed material being used and stored at an unauthorized location, (2) unauthorized personnel using licensed material, (3) physical inventories not being performed at 6-month intervals, (4) failure to properly post radiation areas, (5) operating without an authorized radiation protection officer, (6) inadequate receipt records, (7) failure to prepare shipping papers, (8) failure to perform monthly vehicle surveys or quarterly storage area surveys, and (9) job log sheets not being maintained. The licensee responded and paid the civil penalties on July 18, 1984.

Prillaman & Pace, Inc., Martinsville, Virginia
EA 84-19, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $1,000 was issued on April 5, 1984 based on violations attributed to inadequate management of the licensed program by persons who were unfamiliar with NRC requirements and the provisions of the NRC license. The licensee responded on April 26, 1984. After considering the licensee's response, an Order imposing the civil penalties was issued on June 28, 1984. The licensee paid the civil penalties on July 18, 1984.

The Cincinnati Gas and Electric Company, Cincinnati, Ohio
(Miami Fort Station, Units 7 and 8) EA 84-79, Supplements IV and VI

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $500 was issued on August 17, 1984 based on unauthorized individuals removing an Ohmart Model SHRM-PA source holder containing a 10 millicurie cesium-137 sealed source and storing it in an unrestricted area without having secured it against unauthorized removal. As a result, the source holder was missing and attempts to find it have been unsuccessful. In addition, a second similar device apparently broke off its mounting, was mistaken for scrap, and was apparently sold to a scrap dealer. The licensee responded and paid the civil penalties on September 14, 1984.

United States Testing Company, Inc., Hoboken, New Jersey
EA 84-20, Supplement IV

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $10,000 was issued on April 12, 1984 based on violations of NRC requirements associated with an exposure in excess of regulatory limits to the hand of a U.S. Testing employee during the performance of licensed activities. These violations included failure to perform adequate surveys and evaluations before the attempted retrieval of a disconnected 24 curie iridium-192 source. As a result, an employee received a calculated radiation exposure of about 33 rem to one of his hands. The licensee responded on May 7, 1984. After considering the response, an Order was imposed on June 18, 1984. The licensee paid the civil penalties on July 19, 1984.

B. Severity Level III Violations, No Civil Penalty

Arctic Pipe Inspection, Inc., Kenai, Alaska
EA 84-83, Supplements IV and VI

A Notice of Violation was issued on September 20, 1984 based on violations that involved (1) licensed material in an unrestricted area, (2) unlabeled licensed material, and (3) licensed material used by persons other than those named on the license. No civil penalty was proposed because two of the violations were administrative and did not present an immediate safety hazard and the licensee took quick corrective action to dispose of the unlabeled sealed source.

Carnegie-Mellon University, Pittsburgh, Pennsylvania
EA 84-71, Supplements IV and VI

A Notice of Violation was issued on July 25, 1984 based on violations that represented inadequate management control and oversight of the radiation safety program. No civil penalty was proposed because of the licensee's good past performance and the prompt and extensive corrective actions taken after the inspection.

City of Kalamazoo, Michigan, Wastewater Treatment Plant,
Kalamazoo, Michigan
EA 84-69, Supplement VI

A Notice of Violation was issued July 17, 1984 based on violations which involved (1) a gauge being removed from a wastewater process line by two individuals who were not authorized by NRC or an Agreement State, and (2) another gauge containing a nominal 700 millicurie cesium-137 sealed source not being leak tested at the intervals specified on the label. No civil penalty was proposed because of the corrective actions by the licensee.

Laboratory of Clinical Medicine, Sioux Falls, South Dakota
EA 84-91, Supplement VI

A Notice of Violation was issued on September 25, 1984 based on violations of NRC requirements involving unauthorized technicians administering radioactive material that exceeded the prescribed doses on several occasions during the period October 1979 to February 1980. Also, records were not available showing disposal dates of byproduct material during the period July 1981 to December 1982. A civil penalty was not proposed because of the age of the violations and the corrective actions the licensee had taken.

Norfolk Dredging Company, Norfolk, Virginia
EA 84-64, Supplement VI

A Notice of Violation was issued on August 23, 1984 based on a violation of NRC regulations involving the receipt and use of licensable material before an NRC license was issued. No civil penalty was proposed because the licensee's actions resulted, in

part, from the reliance on the direction to go ahead with the acquisition and use of the material by the U.S. Army Corps of Engineers and because the safety hazard associated with the use of the radioactive material was minimal. A letter also was sent to the U.S. Army Corps of Engineers in Norfolk, Virginia.

Nuclear Metals, Inc., Concord, Massachusetts
EA 84-86, Supplement IV

A Notice of Violation was issued on September 14, 1984 based on a violation involving the exposure of a health physics technician in excess of the regulatory limit. A civil penalty was not proposed because (1) the exposure was only slightly more than the regulatory limit, (2) the cause of the exposure does not appear programmatic in nature, and (3) significant improvements have been made in the licensee's radiation safety program within the past year.

I.A. REACTOR LICENSEES, CIVIL PENALTIES AND ORDERS

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

MAR 1 3 1984

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

Gentlemen:

SUBJECT: PROPOSED IMPOSITION OF CIVIL PENALTY: EA 84-13
UNAUTHORIZED ENTRY INTO A LOCKED HIGH RADIATION AREA
REFERENCE: INSPECTION REPORT NO. 50-261/84-05

A special safety inspection was conducted by this office during the period of February 21-22, 1984, of activities authorized by NRC Operating License No. DPR-23 for the H. B. Robinson facility. The inspection included a review of the circumstances surrounding the entry into the unit's reactor sump by an experienced Carolina Power and Light (CPL) Licensed Reactor Operator and a contract health physics employee. As a result of this inspection, significant failures to comply with NRC regulatory requirements were identified and, accordingly, an Enforcement Conference to discuss this matter was held in the Region II Office on February 23, 1984.

The violation described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty involves a failure to follow procedures which implement H. B. Robinson's Technical Specifications for entry into a locked high radiation area - an area where dose rates are in excess of 1 rem per hour. As a result of this failure, a worker entered the reactor sump area (reactor cavity) at a time when the retractable in-core detector thimbles were withdrawn and the sump was classified as a locked high radiation area. The worker received 0.4 rem during his stay in the area (about one-half minute). The licensee subsequently measured the radiation fields present in the sump under similar conditions and found dose rates greater than 75 rems per hour in the area occupied by the worker. Under your Technical Specifications and radiation protection procedures, the worker should not have been permitted entry into that high radiation area without having received a specific radiation work permit (RWP). The worker failed to obtain a specific RWP.

The NRC is concerned that this violation of regulatory requirements could have resulted in the worker having exceeded the dose limits for exposure to ionizing radiation set forth in 10 CFR 20.101. It is fortuitous that the worker did not

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

remain in the area for a longer period of time. CPL stated, during the Enforcement Conference on February 23, 1984, that the cause of this event was a failure on the part of the contract radiation protection technician to exercise good radiological control practices and a similar failure on the part of the operator to be fully aware of the extent of the radiation hazards present in the reactor sump at the time the entry was made. A more basic cause of this event was the failure of CPL to establish appropriate controls, including administrative control of keys, adequate training of supervisory and operating personnel regarding the hazards incident to entries into locked high radiation areas under non-emergency conditions and provision of specific written procedures for entry into potentially hazardous radiation fields. These controls would have ensured other plant management involvement in the decision to enter a potentially hazardous area. Had the workers been required to obtain a specific RWP prior to entry, a review of circumstances of the entry would have been performed by the plant radiation protection foreman. Such a review could have provided the additional control necessary to have prevented entry into the reactor sump while the thimbles were withdrawn.

To emphasize the seriousness of this violation, I have been authorized, after consultation with the Director of the Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Thirty Thousand Dollars ($30,000) for the violation described in the enclosed Notice. The violation has been categorized at Severity Level III in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C.

The base civil penalty for a Severity Level III violation is $40,000. Prior notice of similar events had been provided to CPL by NRC Information Notice 82-51, issued in December 1982, and entitled "Overexposure in Reactor Cavities." Although CPL did take action as a result of this notice, the action taken was not extensive enough to prevent the unauthorized entry into the reactor cavity sump on February 19, 1984. Therefore, the base civil penalty amount could be increased by 25 percent. However, CPL did report this event immediately upon its discovery, even though this event was not required to be reported. Also, CPL promptly investigated the circumstances of this event and took decisive action including permanently preventing entry into the area. In recognition of the above, I have decided not to escalate the penalty for prior notice and have also reduced the base penalty by 25 percent because you promptly reported this event and took prompt and extensive correction action.

You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. Your response should specifically address the corrective actions planned with regard to ensuring that plant procedures, particularly in the area of radiation protection, are adhered to by all H. B. Robinson employees. In addition, please describe actions you have taken to assure that supervisory and licensed personnel are aware of their administrative control responsibilities for assuring the radiological safety of plant personnel. The NRC is particularly concerned over licensed operators' lack of awareness of the magnitude of the cavity radiation hazard since Information Notice 82-51 specifically stressed this. Your response should also describe the additional training you will conduct to assure H. B. Robinson personnel are aware of hazards incident to their employment. In your response, appropriate reference to previous submittals is acceptable.

MAR 13 1984

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

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

Sincerely,

Robert D Martin for

James P. O'Reilly
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Carolina Power and Light Company
H. B. Robinson Plant

Docket No. 50-261
License No. DPR-23
EA 84-13

As a result of the inspection conducted on February 21-22, 1984, and in accordance with the NRC Enforcement Policy, 10 CFR 2, Appendix C, violations of NRC requirements were identified.

On February 19, 1984, work was being performed in the containment in preparation for defueling the reactor. The reactor cavity was being filled with water as a prerequisite for the anticipated movement of fuel. The operating staff knew that the in-core detector thimbles had been withdrawn into the reactor sump. The Shift Foreman instructed a Licensed Reactor Operator to go to the reactor keyway sump to check for leaks. The Shift Foreman did not give explicit instructions concerning the method the operator was to use to check for leaks, nor did he caution the operator about the radiation hazards which would be encountered in the sump.

A key locker was maintained in the control room as a means of satisfying the administrative control requirements for keys to locked high radiation areas. The operator obtained the key to the reactor sump from the locker and proceeded to the reactor containment. The operator explained to a radiation protection technician that he needed the technician to unlock the steam generator bay door and to provide health physics (radiation protection) coverage while the operator checked for leaks in the reactor keyway sump.

When the two workers entered the steam generator bay, the operator proceeded to the keyway sump entrance. This entrance was posted with radiological caution signs reading: "HIGH RADIATION AREA, AIRBORNE RADIOACTIVITY AREA, NO ENTRY, CONTACT RC FOREMAN." Despite these signs, the two workers decided to open the floor hatch to determine if there was any leakage into the sump. The operator had in his possession a respirator for use in entries into airborne radioactivity areas but the technician did not. After the operator unlocked and opened the sump cover, a health physics technician without entering the sump, used a radiation dose rate instrument (a Teletector) to measure the dose rate at the bottom of the first ladder. It was between 1.5 and 2.0 rems/hr.

The operator did not know the extent of the survey which had been done by the technician, yet he donned his respirator and entered the sump. He proceeded across the platform at the bottom of the first ladder and went down the second ladder to a level just below the biological shield. In this location, he was exposed to the withdrawn in-core detector thimbles without intervening shielding. This area was later surveyed and the dose rate was approximately 75 to 100 rems/hr.

After approximately 30 seconds in this area, the operator left the sump and relocked the sump cover. The operator performed other work in the containment and left at the containment checkpoint approximately 30 minutes later. The

checkpoint monitor determined that the operator had 0.40 rem indicated on his self-reading pocket dosimeter and as a result of this finding, the licensee initiated an investigation into the circumstances of the unanticipated dose the operator had received. The operator's thermoluminescent dosimeter read 0.539 rem. A radiation worker with an established exposure history is permitted by 10 CFR 20.101 to receive up to 3 rems in a calendar quarter.

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

Technical Specification 6.11 requires that procedures for radiation protection be prepared consistent with the requirements of 10 CFR 20 and be approved, maintained, and adhered to for all operations involving radiation exposure.

10 CFR 20.201(b) requires each licensee to make or cause to be made such surveys as:

1. may be necessary for the licensee to comply with the regulations in Part 20, and

2. are reasonable under the circumstances to evaluate the extent of the radiation hazards that may be present.

Technical Specification 6.13 requires that:

1. a Radiation Work Permit be issued for entries into a high radiation area (an area where the dose rate exceeds 0.1 rem per hour),

2. each worker entering into high radiation areas possess a dose rate indicating instrument capable of indicating the dose rate encountered, and

3. entries into locked high radiation areas (areas where the dose rate exceeds 1.0 rem per hour) be controlled by locks with their keys maintained under the administrative control of the Shift Foreman on duty.

Health Physics Procedure HPP-006, Radiation Work Permits (RWP), requires that:

1. work in the Radiation Control Area be performed under a RWP,

2. workers on routine RWPs use radiological posting in order to determine requirements to enter an area, and

3. a routine RWP is valid for repetitive work with relatively small radiological hazards.

Contrary to the above, on February 19, 1984:

1. a health physics technician failed to perform adequate surveys for a licensed operator when an entry was made into the reactor keyway sump (where dose rates were in excess of 75 rems/hr.) in that he did not:

   a. survey all areas to be entered by the operator to determine the dose rate hazard that was present,

   b. perform an air survey to determine the airborne concentration of radioactive contaminants in the sump and ascertain the internal contamination hazard present in the sump.

2. the licensed reactor operator entered the reactor keyway sump and did not adhere to radiological safety requirements in that he did not:

   a. obey radiological postings which prohibited his entry into the sump and also required that the Radiation Control Foreman be contacted if entry was required,

   b. obtain a special RWP for the sump entry, an entry into an area with a known significant radiological hazard present,

   c. fully understand the radiological hazards involved when he obtained a key to enter a locked high radiation area.

3. the Shift Foreman provided a key allowing entry into a locked high radiation area to a worker without assuring adequate administrative control in that he did not assure that the entry into the area was controlled to preclude any potential for excessive radiation exposure.

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

Pursuant to 10 CFR 2.201, Carolina Power and Light Company is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D. C. 20555, with a copy to this office, within 30 days of the date of this Notice a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violations; (2) the reasons for the violations if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U. S. C. 2232, the response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Carolina Power and Light Company may pay the civil penalty in the amount of Thirty Thousand Dollars ($30,000) for the violation, or may protest imposition of the civil penalty in whole or in part by a written answer. Should Carolina Power and Light Company fail to answer within the time specified, the

Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalty in the amount proposed above. Should Carolina Power and Light Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer may: (1) deny the violations listed in this Notice in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reason why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

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

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

FOR THE NUCLEAR REGULATORY COMMISSION

Robert D Martin for
James P. O'Reilly
Regional Administrator

Dated at Atlanta, Georgia
this 13 day of March 1984

CP&L

Carolina Power & Light Company

P. O. Box 1551 • Raleigh, N. C. 27602

MAY 23 1984

SERIAL: NLS-84-196

E. E. UTLEY
Executive Vice President
Power Supply and Engineering & Construction

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

H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2
DOCKET NO. 50-261 - LICENSE NO. DPR-23
IE INSPECTION REPORT 84-05

Dear Mr. DeYoung:

Carolina Power & Light Company (CP&L) has received IE Inspection Report No. 50-261/84-05 for the H. B. Robinson Steam Electric Plant Unit No. 2 (HBR2) regarding an inspection conducted by an NRC Region II inspector on February 21-22, 1984, and the NRC's letter of March 13, 1984 transmitting a Notice of Violation and Proposed Imposition of Civil Penalty (EA-84-14). The above items do not contain any information of a proprietary nature.

The violation cited in the Notice of Violation involves the entry into the unit's containment vessel (CV) sump by a reactor operator employed by CP&L. Carolina Power & Light Company agrees with your conclusion about the seriousness of the event and took actions consistent with its gravity.

The recitation of the facts surrounding this incident contained in the Notice of Violation is essentially accurate. Carolina Power & Light Company disagrees, however, with the conclusion stated in your letter that a basic cause of this event was a failure by CP&L to establish appropriate controls and procedures to prevent such an occurrence. Carolina Power & Light Company believes that appropriate administrative controls and procedures had been established by its management, that management provided adequate training to enable compliance with the established procedures and controls, and that the violation occurred because of the failure of the individuals involved to adhere to them. The fact that the required procedures and controls were established is recited on page 2 of the Notice of Violation. It identifies the requirements and follows directly with a summary of the CP&L procedure that was in effect to implement the requirements.

In addition to CP&L's prompt voluntary reporting of this incident and its immediate and decisive corrective actions, CP&L has appropriately disciplined the three individuals involved. In view of the objectives and provisions of the NRC's Enforcement Policy, 10 CFR Part 2, Appendix C, as revised, 49 Fed. Reg. 8583 (March 8, 1984) and the prompt CP&L action on this violation, CP&L

believes that assessing the proposed civil penalty of $30,000 against CP&L will be counterproductive. Carolina Power & Light Company, therefore, respectfully requests that NRC rescind its decision to impose a civil penalty in this case or, in the alternative, to mitigate the penalty in full.

Carolina Power & Light Company's response to the Notice of Violation is set forth immediately below, followed by a discussion of the factors which we believe justify elimination of the civil penalty in this case.

I. RESPONSE TO NOTICE OF VIOLATION

The NRC finding was as follows:

Severity Level III Violation (IER-84-05-01-SL3)

"On February 19, 1984, work was being performed in the containment in preparation for defueling the reactor. The reactor cavity was being filled with water as a prerequisite for the anticipated movement of fuel. The operating staff knew that the in-core detector thimbles had been withdrawn into the reactor sump. The Shift Foreman instructed a Licensed Reactor Operator to go to the reactor keyway sump to check for leaks. The Shift Foreman did not give explicit instructions concerning the method the operator was to use to check for leaks, nor did he caution the operator about the radiation hazards which would be encountered in the sump.

A key locker was maintained in the control room as a means of satisfying the administrative control requirements for keys to locked high radiation areas. The operator obtained the key to the reactor sump from the locker and proceeded to the reactor containment. The operator explained to a radiation protection technician that he needed the technician to unlock the steam generator bay door and to provide health physics (radiation protection) coverage while the operator checked for leaks in the reactor keyway sump.

When the two workers entered the steam generator bay, the operator proceeded to the keyway sump entrance. This entrance was posted with radiological caution signs reading: 'HIGH RADIATION AREA, AIRBORNE RADIOACTIVITY AREA, NO ENTRY, CONTACT RC FOREMAN.' Despite these signs, the two workers decided to open the floor hatch to determine if there was any leakage into the sump. The operator had in his possession a respirator for use in entries into airborne radioactivity areas, but the technician did not. After the operator unlocked and opened the sump cover, a health physics technician without entering the sump, used a radiation dose rate instrument (a Teletector) to measure the dose rate at the bottom of the first ladder. It was between 1.5 and 2.0 rems/hr.

The operator did not know the extent of the survey which had been done by the technician, yet he donned his respirator and entered the sump. He proceeded across the platform at the bottom of the first ladder and went down the second ladder to a level just below the biological shield. In this location, he was exposed to the withdrawn in-core detector thimbles without intervening shielding. This area was later surveyed and the dose rate was approximately 75 to 100 rems/hr.

After approximately 30 seconds in this area, the operator left the sump and relocked the sump cover. The operator performed other work in the containment

and left at the containment checkpoint approximately 30 minutes later. The checkpoint monitor determined that the operator had 0.40 rem indicated on his self-reading pocket dosimeter and as a result of this finding, the licensee initiated an investigation into the circumstances of the unanticipated dose the operator had received. The operator's thermoluminescent dosimeter read 0.539 rem. A radiation worker with an established exposure history is permitted by 10 CFR 20.101 to receive up to 3 rems in a calendar quarter.

In accordance with the NRC Enforcement Policy, 10 CFR 2, Appendix C, and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, 42 U. S. C. 2282, PL96-295, and 10 CFR 2.205, the particular violations and associated civil penalty is set forth below:

Technical Specification 6.11 requires that procedures for radiation protection be prepared consistent with the requirements of 10 CFR 20 and be approved, maintained, and adhered to for all operations involving radiation exposure.

10 CFR 20.201(b) requires each licensee to make or cause to be made such surveys as:

1. may be necessary for the licensee to comply with the regulations in Part 20, and

2. are reasonable under the circumstances to evaluate the extent of the radiation hazards that may be present.

Technical Specification 6.13 requires that:

1. a Radiation Work Permit be issued for entries into a high radiation area (an area where the dose rate exceeds 0.1 rem per hour),

2. each worker entering into high radiation areas possess a dose rate indicating instrument capable of indicating the dose rate encountered, and

3. entries into locked high radiation areas (areas where the dose rate exceeds 1.0 rem per hour) be controlled by locks with their keys maintained under the administrative control of the Shift Foreman on duty.

Health Physics Procedure HPP-006, Radiation Work Permits (RWP), requires that:

1. work in the Radiation Control Area be performed under a RWP,

2. workers on routine RWPs use radiological posting in order to determine requirements to enter an area, and

3. a routine RWP is valid for repetitive work with relatively small radiological hazards.

Contrary to the above, on February 19, 1984:

1. a health physics technician failed to perform adequate surveys for a licensed operator when an entry was made into the reactor keyway sump (where dose rates were in excess of 75 rems/hr.) in that he did not:

   a. survey all areas to be entered by the operator to determine the dose rate hazard that was present,

   b. perform an air survey to determine the airborne concentration of radioactive contaminants in the sump and ascertain the internal contamination hazard present in the sump.

2. the licensed reactor operator entered the reactor keyway sump and did not adhere to radiological safety requirements in that he did not:

   a. obey radiological postings which prohibited his entry into the sump and also required that the Radiation Control Foreman be contacted if entry was required,

   b. obtain a special RWP for the sump entry, an entry into an area with a known significant radiological hazard present,

   c. fully understand the radiological hazards involved when he obtained a key to enter a locked high radiation area.

3. the Shift Foreman provided a key allowing entry into a locked high radiation area to a worker without assuring adequate administrative control in that he did not assure that the entry into the area was controlled to preclude any potential for excessive radiation exposure."

Response

1. Admission or Denial of the Alleged Violation

Carolina Power & Light Company denies the violation in part. Carolina Power & Light Company acknowledges that an entry was made into the Containment Vessel (CV) sump by one person in violation of the posted requirements and this person received approximately 0.4 Rem exposure. However, CP&L denies that the more basic cause of this event was the failure of CP&L to establish appropriate controls as stated in the Proposed Imposition of Civil Penalty. Carolina Power & Light Company believes that the cause of this event was the failure of certain individuals to follow administrative controls, notwithstanding adequate training, as discussed below.

2. Reason for the Violation

2.a Description of Circumstances

On February 19, 1984, the unit was in a Steam Generator Replacement Outage. Preparations were being made to defuel the reactor. At approximately 0430 hours, the routine reading of the pocket dosimeter of an individual exiting the CV indicated that he received 0.40 Rem exposure. This was unexpected, and exceeded the 0.15 Rem allocated to him for the CV entry. The individual's TLD was read and it indicated a cumulative dose of 0.539 Rem. The Health Physics (HP) Foreman and Shift Foreman were informed of the situation. It was learned that the operator had made an entry into the CV sump area with health physics coverage by a contract HP Technician. The purpose of the entry to the CV sump area was to determine if water was leaking past the Pneuma Seal around the vessel flange. The subsequent investigation determined that the following events resulted in the CV sump entry during which the individual received 0.40 Rem.

On February 17, 1984, the Incore Flux Thimbles had been retracted to their normal refueling position. The Pneuma Seal had been installed and the reactor refueling cavity was filled to approximately two feet above the reactor vessel flange.

On February 19, 1984, at approximately 0200, the Shift Foreman told a control operator to go into the CV and check for leaks around the Pneuma Seal. The Shift Foreman was aware that the thimbles were withdrawn. The Shift Foreman instructed the operator to carry a respirator with him. The operator signed out a locked high radiation area key.

Upon entering the CV, the operator sought out the CV HP Technician and told him he was going to need HP coverage to check for leaks around the reactor vessel.

Since the pump bays are under HP control, the HP Technician had to use his assigned key to open the bay door.

At the CV sump entry were two multi-pocket radiation signs. They were attached to the railing next to the CV sump hatch. The first sign read: "High Radiation Area, Airborne Radiation Area." The second sign read: "No Entry, Contact RC Foreman." (Note: RC, radiation control, is synonymous with HP, health physics.)

The HP Technician did not notice this second sign: "NO ENTRY, CONTACT RC FOREMAN."

The operator opened the CV sump hatch with the locked high radiation area key obtained in the control room. The HP Technician surveyed the area above the platform where he perceived the operator was going. He obtained readings, from 1.5 to 2.0 R/hr. No air samples were taken. The operator donned his respirator and was told to "Make it quick." The operator descended the ladder, walked across the platform, partially descended the second ladder to where, by craning his neck, he could see just under the bio-shield. The operator estimates he climbed down

approximately 5 feet below the platform. After a quick look back at the vessel, he reversed his path and exited the sump. He spent approximately one minute in the sump, of which 20 to 30 seconds was spent on the lower ladder.

The operator relocked the CV sump hatch door. The operator's self-reading pocket dosimeter was not read upon exiting the CV sump since the individuals involved believed the exposure had been minimal. The HP Technician went on to inspect another pump bay. The operator went to the refueling floor to monitor the cavity fill operation. He remained there for approximately 45 minutes, after which he exited containment.

A subsequent survey of the CV sump yielded exposure rates of 1.5 to 4 R/hr on the platform. On the ladder just below the platform, exposure rates from 75 to 100 R/hr were measured. These results explained where the operator's exposure occurred.

The root cause of this event was failure of the operator and HP Technician to adhere to the posting "No Entry, Contact RC Foreman," resulting in failure to obtain a non-routine RWP. This occurred primarily because the HP Technician did not see the sign and the operator assumed that the HP coverage he had was equivalent to contacting the RC Foreman.

2.b Reason For Denial of the Violation In Part

The Shift Foreman's administrative control of a locked high radiation area to preclude any potential for excessive radiation exposure is provided by the Key Control System and the radiation postings. If the posting "No Entry, Contact RC Foreman" had been adhered to, the inadequate actions by the HP Technician and operator as stated in the proposed violation would not have occurred. If the HP Foreman had been notified, a non-routine RWP would have been issued and the operator would have fully understood the radiological hazards involved. The HP Foreman would have assigned someone familiar with the CV sump to perform the necessary surveys, and to determine the dose rate and airborne concentrations that were present in the sump.

The necessity to follow instructions on radiological postings and the conditions for which a non-routine RWP is necessary are both subjects which are emphasized in the General Employee Training (GET) program. The GET exam includes questions specific to radiological hazards and postings. All three individuals involved successfully completed the GET exam within the past year. In addition, the Shift Foreman and Operator received training on radiological postings during their annual NRC SRO/RO training/retraining classes. Carolina Power & Light Company reviewed IE Notice 82-51 describing similar events at other utilities with the HP personnel and the senior reactor operators. The Shift Foreman and Operator are required to review the Radiation Control Manual each year. Procedures covering radiological postings and the issuance of non-routine RWPs are contained in the Radiation Control Manual. Thus, all three individuals had received training adequate to deal with the conditions they encountered and had demonstrated their comprehension of these matters by successfully completing their GET exams.

It is not necessarily true that additional administrative controls would have ensured other plant management involvement in the decision to enter the CV sump. Plant management involvement would have been ensured if the posting at the entrance to the CV sump had been adhered to. When an administrative control is not adhered to, appropriate disciplinary action should be taken with the individuals involved and others affected by it should be made aware of the seriousness of the event. Adding more administrative controls alone does not prevent recurrence.

3. Corrective Steps Which Have Been Taken and Results Achieved

An investigation was initiated by CP&L and although not required, the NRC Region II was promptly notified.

A second lock under control of the Manager E&RC was placed on the CV sump hatch. The CV sump hatch was subsequently welded shut to prevent any possibility of entry while the thimbles were withdrawn. This weld will be removed after the thimbles are inserted or when the proposed key control system is implemented. The proposed key control system to be discussed later in this response will provide positive control, and the hatch is not expected to be welded shut in the future.

Similar locked high radiation areas were reviewed to ensure proper postings and proper access controls were in place. Specifically, these areas were under the fuel transfer canal in the CV and the spent resin storage tank. A memorandum discussing the results of this review was discussed with contractor and CP&L employees by plant management.

Training sessions were conducted with Operations, HP, and Management personnel discussing the specifics of the event and the necessity to ensure that all procedures are used and followed. Emphasis was placed on the responsibility and accountability each employee has in complying with all plant procedures.

Disciplinary action was taken with the three individuals (HP Technician, Licensed Operator, and Shift Foreman) involved in the entry into the CV sump. The HP Technician (contract employee) was let go, and the Licensed Operator and Shift Foreman were sent home without pay for one week.

In addition, the Shift Foreman and Operator studied, and then successfully completed an essay test on the following technical specifications and procedures:

1. IE Notice 82-51 - Over-Exposure in PWR Cavities
2. HPP-006 - Radiation Work Permits
3. DP-003 - Exposure Tracking
4. DP-014 - Quarterly Dose Limit Extention Authorization
5. ERC-001 - Section 6.0, Control of Access to Radiation Control Area
6. AP-027 - Section 4.1.16, Key Control
7. SD-012 - Incore Instrumentation System
8. FHP-009 - Thimble Retraction for Plant Shutdown/Refueling
9. Technical Specification 3.11 - Movable In-Core Instrumentation
10. Technical Specification 6.13 - High Radiation Area

These corrective actions address the requirements stated in the last paragraph of page 2 of the Proposed Imposition of Civil Penalty: EA 84-14, Unauthorized Entry Into A Locked High Radiation Area, dated March 13, 1984.

4. Corrective Steps Which Will be Taken to Avoid Further Violations

Carolina Power & Light Company believes that the previously stated corrective steps (item 3 above) taken will prevent further violation. However, in order to raise the sensitivity of employees to the hazards of very high levels of radiation, a two level key system will be established.

Administrative controls will determine when access to an area is to be controlled with the higher level key and who will issue each level of key. This determination on which level of key to use for an area will be based either on the exposure history or on the current general area radiation level of an area.

5. Date When Full Compliance Will be Achieved:

Full compliance with Technical Specification 6.11, 6.13, and 10 CFR 20.201(b) has been achieved by the immediate corrective actions described above.

Administrative controls for the two level key system for locked high radiation areas will be scheduled to be developed and implemented by September 1, 1984.

II. REQUEST FOR RECONSIDERATION OF CIVIL PENALTY

It is clear from the facts surrounding this event as stated in the Notice of Violation and as supplemented by CP&L in its response, above, that had the three individuals involved followed existing procedures per their instructions and training, no violation would have occurred.

Had the reactor operator and HP technician obeyed the postings at the entrance of the keyway sump, they would have contacted the Radiation Control Foreman who would have required a non-routine RWP. This, in turn, would have ensured that necessary surveys of the area were taken and that the operator fully understood the radiation hazard involved. Proper and adequate administrative controls and procedures were, therefore, in place to prevent the incident had these workers not disregarded them. As discussed in our response, above, each of the employees had received training concerning procedures for entering locked high radiation areas and had recently successfully completed examinations on these subjects. In addition, CP&L had notified HP personnel and licensed senior reactor operators of the similar event described in IE Notice 82-51.

We believe that where the root cause of a violation is individual employee error in failing to follow procedures and not a failure on the part of the licensee's management to institute appropriate procedures, training and administrative controls, the most effective means of preventing recurrence of

a similar incident is to discipline the individuals themselves. It is a licensee's obligation to take prompt disciplinary action with respect to such individuals and where the licensee has fulfilled that responsibility, no useful purpose will be served by imposing a civil penalty against the licensee.

In the Notice of Violation, this violation has been classified as Severity Level III. Under the Commission's Enforcement Policy, the NRC has discretion as to whether to impose a civil penalty for a Severity Level III Violation. This discretion has been broadened in the recent revision of the Policy by the elimination of the provision that civil penalties will be "usually imposed" for Severity Level III violations. Revised General Statement of Policy and Procedure for Enforcement Actions, 49 Fed. Reg. 8583, 8584-85 (March 8, 1984). As we understand the fundamental objectives underlying the Enforcement Policy, that policy works best to promote and protect the public health and welfare when it operates as a system of incentives and deterrents to the particular licensee being cited and the industry as a whole. Properly administered, the Enforcement Policy can provide encouragement to licensees to engage in self-policing, voluntary reporting of noncompliances, and self-improvement programs. The power to impose a civil penalty should, of course, be exercised where the facts indicate that the licensee has acted improperly and where the penalty is likely to act as a deterrent against similar conduct by the particular licensee and the industry. Where a licensee has acted responsibly, however, as CP&L has in this instance, there is no improper behavior to deter.

In setting the proposed civil penalty at $30,000, the NRC has explicitly recognized that CP&L reported this event to NRC promptly upon discovery of its occurrence even though the event was not reportable under NRC regulations; and that CP&L took immediate corrective actions to prevent recurrence of a similar incident. Carolina Power & Light Company acknowledges this recognition of its conscientious efforts. We believe, however, that to impose any civil penalty under these facts is to use the civil penalty as a purely punitive measure which is inappropriate where a licensee has acted responsibly and in good faith. Were NRC to exercise its discretion not to impose a civil penalty in this case, that action would reinforce for CP&L personnel the importance NRC attaches to voluntary reporting of possible violations and would provide an incentive for other utilities to do so as well. The civil penalty would thus be counterproductive to regulatory intent. In addition, a civil penalty against the Company communicates to the employee that it is the Company, not the employee, who is at fault. An employee in such circumstances is likely to view any disciplinary action against him as unfair, and therefore resent the discipline rather than accept it as a constructive measure.

In addition to CP&L's prompt reporting and corrective actions, an evaluation of this incident against the remaining three factors set forth in Section IV(B) of Appendix C to 10 CFR Part 2 indicates that a civil penalty is not appropriate. Carolina Power & Light Company has not been cited for a violation of a similar nature in the past; nor were multiple examples of this incident identified during the inspection. When the Company received notice of a similar event at another facility in IE Notice 82-51, it took appropriate action in response to the notice; and CP&L disagrees with the statement in the letter transmitting the present notice of violation that CP&L did not take adequate measures in response to the IE Notice 82-51. To the contrary, NRC

personnel reviewed and concurred in CP&L's actions, as discussed in IE Inspection Report No. 83-12 transmitted by letter dated May 26, 1983. The Company had also made HP personnel and senior reactor operators aware of the event and its significance.

For all of these reasons, CP&L respectfully requests NRC to reconsider its imposition of a civil penalty in this case. If, however, NRC believes that it is appropriate to impose a penalty at all, we believe that the Enforcement Policy set forth in 10 CFR Part 2, Appendix C warrants mitigation of the penalty in full. This conclusion is bolstered by the Commission's most recent determination that ". . . self identification and reporting should be encouraged to the maximum extent possible." Revised General Statement of Policy 49 Fed. Reg. at 8585 (March 8, 1984). To this end, mitigation of as much as 50% of a proposed penalty is authorized for any violation promptly identified. As the NRC has already recognized, the event in this case was promptly reported. In addition, the Commission is continuing its practice of permitting up to 50% mitigation for prompt and decisive corrective actions, which are also present in this case, thus justifying 100% mitigation of the penalty.

It is clear that CP&L's immediate corrective actions and prompt reporting of this event to NRC Region II shows the seriousness with which CP&L considered this event. Carolina Power & Light Company's actions following this event make it evident that a civil penalty to stress the seriousness of the event is not necessary. The Company therefore requests that on the basis of its responsiveness, and the fact that the event was caused by individual error and not a lack of administrative controls, the civil penalty be withdrawn or fully mitigated.

If you have any questions concerning this response, please contact my staff or me.

Yours very truly,

E. E. Utley

CLW/ONH/ccc (9942ONH)

cc: Mr. J. P. O'Reilly (NRC-RII)
Mr. G. Requa (NRC)
Mr. Steve Weise (NRC-HBR)

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

Notary (Seal)

My commission expires: 5/15/85

CP&L
Carolina Power & Light Company
P. O. Box 1551 • Raleigh, N. C. 27602

SERIAL: NLS-84-278

JUN 15 1984

E. E. UTLEY
Executive Vice President
Power Supply and Engineering & Construction

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

H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2
DOCKET NO. 50-261 - LICENSE NO. DPR-23
IE INSPECTION REPORT 84-05

Dear Mr. DeYoung:

The NRC Region II letter of March 13, 1984 transmitted a Notice of Violation and Proposed Imposition of Civil Penalty (EA-84-14). Carolina Power & Light Company (CP&L) responded to the Notice of Violation in its letter, Serial NLS-84-196, of May 23 to you. Additional information is available which may be of use to you in evaluating our response. This letter supplements our May 23 letter and provides further statement of facts concerning corrective steps which were taken subsequent to the incident.

On page 7 of our May 23 letter, corrective steps were enumerated. Included among those steps were training sessions which "were conducted with Operations, HP, and management personnel discussing the specifics of the event and the necessity to ensure that all procedures are used and followed." This brief description may not have characterized fully the breadth of this training.

These training sessions were initiated immediately after the February 19, 1984 incident. Plant management developed a training instruction on February 22, 1984 and directed all site managers and supervisors to:

a. Review the training instruction content with all plant and contractor personnel under their supervision who have unescorted access to radiation areas.

b. Upon their return to site, review the training instruction content with personnel not currently on site.

c. Provide records of the reviews.

On February 22, 1984, Mr. G. P. Beatty, Manager of the Robinson Nuclear Project, distributed the training instructions and conducted meetings with the site managers and supervisors who supervised persons having unescorted access to radiation areas. Attachment 1 is a list of all persons who attended these meetings. The purpose of these meetings was for the Project Site Manager to review the incident, stress the importance and significance of the incident, and to reiterate management's support and insistence upon strict adherence to procedures including those which govern work in radiation areas and radioactively contaminated areas.

The reviews requested of the site managers and supervisors were completed in accordance with the request of plant management. The reviews started promptly on February 22 and by February 29, 1984 a total of 1,177 personnel of CP&L and its contractors received this supplement to their training. Specific documentation of the completion of this training identifying individuals trained is on file at the H. B. Robinson Plant.

The training instruction in which personnel were trained included detailed description of the incident and a review of the requirements of procedures which control entry into high radiation and locked high radiation areas. It further extended the specific facts concerning this incident to identify other potential high radiation or locked high radiation areas of the plant. Attention was directed toward the need for strict adherence to all plant procedures including those related to work in radiation areas.

In addition to the training sessions, other actions were taken which were not fully described in our May 23 letter. They included:

a. An investigation of the incident was performed by three individuals who are organizationally independent of the H. B. Robinson Project Department. The results of this investigation were utilized in formulation of other corrective steps described in our May 23 letter.

b. The General Employee Training (GET) was revised in response to the investigations performed into this incident. More explicit treatment was given to the requirements for radiological protection in high and locked high radiation areas.

c. Additional interviews by CP&L Radiological Control personnel are given to contract Senior Health Physics Technicians to verify their capabilities prior to their surveilling work.

Carolina Power & Light Company stressed in its May 23 letter that it had taken numerous actions to promptly investigate, evaluate, and correct the conditions which contributed to the February 19 incident. This supplementary information further supports the facts in this matter. We, therefore, reiterate the request in our May 23 letter that the Civil Penalty imposed by the NRC for the February 19 incident be withdrawn or fully mitigated.

If you have any questions regarding this, please contact my staff or me.

Yours very truly,

for E. E. Utley

EEU/mf (273SRZ)

Attachment

cc: Mr. J. P. O'Reilly (NRC-RII)
Mr. G. Requa (NRC)
Mr. Steve Weise (NRC-HBR)
Mr. S. A. Varga (NRC)

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

AUG 28 1984

License No.: DPR-23
Docket No.: 50-261
EA: 84-13

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

Gentlemen:

SUBJECT: CIVIL PENALTY: EA 84-13 (REFERENCE REPORT NO. 50-261/84-05)

This refers to your letters of May 23, 1984 and June 15, 1984 in response to the Notice of Violation and Proposed Imposition of Civil Penalty, EA 84-13, sent to you with our letter of March 13, 1984. Our letter concerned a violation brought to the attention of our inspector by your staff while conducting an inspection on February 21-22, 1983 at the H. B. Robinson Steam Electric Plant Unit No. 2 of activities authorized by NRC License No. DPR-23. The violation was discussed during an Enforcement Conference conducted in the Region II Office in Atlanta, Georgia on February 23, 1984, and during a subsequent Enforcement Conference that I chaired at the plant site on August 21, 1984.

The information provided during the enforcement conferences and in your responses to the Notice of Violation and Proposed Imposition of Civil Penalty has been carefully reviewed. As discussed in the March 13, 1984 NRC letter which proposed the civil penalty, the violation was significant and could have resulted in a worker exceeding the dose limits for exposure to ionizing radiation. As discussed in the Appendix, this violation was correctly categorized as a Severity Level III violation and such violations usually result in the imposition of a civil penalty.

However, the NRC Enforcement Policy, 10 CFR Part 2, Appendix C provides that judgment and discretion should be exercised when determining the appropriate enforcement sanction. I recognize that Carolina Power and Light (CPL) (1) reported this event immediately upon its discovery, even though this event was not required to be reported, (2) promptly investigated the circumstances of this event and took decisive corrective action including (a) strong disciplinary action against involved personnel who performed inadequately, and (b) extensive training sessions with operations, health physics, and management personnel concerning the specifics of this event and the necessity to ensure that all procedures are used and followed, and (3) implemented a long range improvement program in the area of radiological protection which will, in part,

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AUG 2 8 1984

be based on the principle that radiological protection is every staff member's responsibility. Finally, I was impressed by the attitudes of the involved shift foreman and reactor operator. They acknowledge their mistakes and are committed to improved performance. You should assure that the lessons to be learned from their experiences are not limited to them alone but are learned by all the operating staff. In view of all of these circumstances, I have decided to exercise my discretion and mitigate completely the civil penalty proposed in the NRC Notice of Violation and Proposed Imposition of Civil Penalty dated March 13, 1984.

I wish to emphasize that the full mitigation of the civil penalty does not diminish the NRC's concern for the lack of adequate radiation protection control demonstrated by this Severity Level III violation and the need for continued steady progress in improved performance in this area.

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

Sincerely,

R C DeYoung

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Appendix - Evaluations and
Conclusions

cc w/encls:
G. P. Beatty, Jr., Manager
Robinson Nuclear Project Department
R. E. Morgan, Plant General Manager

APPENDIX

EVALUATIONS AND CONCLUSIONS

The violation and associated civil penalty are identified in the Notice of Violation and Proposed Imposition of Civil Penalty dated March 5, 1984. The NRC evaluations and conclusions regarding the licensee's responses dated May 23, 1984 and June 15, 1984 are presented.

Restatement of Violation Issued March 13, 1984

Technical Specification 6.11 requires that procedures for radiation protection be prepared consistent with the requirements of 10 CFR 20 and be approved, maintained, and adhered to for all operations involving radiation exposure.

10 CFR 20.201(b) requires each licensee to make or cause to be made such surveys as:

1. may be necessary for the licensee to comply with the regulations in Part 20, and

2. are reasonable under the circumstances to evaluate the extent of the radiation hazards that may be present.

Technical Specification 6.13 requires that:

1. a radiation work permit be issued for entries into a high radiation area (an area where the dose rate exceeds 0.1 rem per hour),

2. each worker entering into high radiation areas possess a dose rate indicating instrument capable of indicating the dose rate encountered, and

3. entries into locked high radiation areas (areas where the dose rate exceeds 1.0 rem per hour) be controlled by locks with their keys maintained under the administrative control of the shift foreman on duty.

HP Procedure HPP-006, RWP, requires that:

1. work in the radiation control area be performed under a RWP,

2. workers on routine RWPs use radiological posting in order to determine requirements to enter an area, and

3. a routine RWP is valid for repetitive work with relatively small radiological hazards.

Contrary to the above, on February 19, 1984:

1. a HP technician failed to perform adequate surveys for a licensed operator when an entry was made into the reactor keyway sump (where dose rates were in excess of 75 rems per hour) in that he did not:

a. survey all areas to be entered by the operator to determine the dose rate hazard that was present,

b. perform an air survey to determine the airborne concentration of radioactive contaminants in the sump and ascertain the internal contamination hazard present in the sump.

2. the licensed RO entered the reactor keyway sump and did not adhere to radiological safety requirements in that he did not:

a. obey radiological postings which prohibited his entry into the sump and also required that the radiation control (RC) foreman be contacted if entry was required.

b. obtain a special RWP for the sump entry; an entry into an area with a known significant radiological hazard present,

c. fully understand the radiological hazards involved when he obtained a key to enter a locked high radiation area.

3. the shift foreman provided a key allowing entry into a locked high radiation area to a worker without assuring adequate administrative control in that he did not assure that the entry into the area was controlled to preclude any potential for excessive radiation exposure.

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

Licensee Comments and NRC Evaluations:

A. Licensee Comment: The root cause of this event was failure of the licensed reactor operator (RO) and contract health physics (HP) technician to adhere to the posted sign "HIGH RADIATION AREA, AIRBORNE RADIOACTIVITY AREA, NO ENTRY, CONTACT RC FOREMAN" resulting in failure to obtain a nonroutine RWP. This occurred primarily because the HP technician did not see the keyway sump entry sign, and the licensed RO assumed the HP coverage he had was equivalent to contacting the RC foreman.

NRC Evaluation: We cannot agree that the single failure to note the posted sign was the root cause of this event. The root cause of the event involved several factors including (1) the authorization, by the shift foreman, of the entry into the reactor cavity area without first assuring that adequate radiological controls would be implemented, (2) the HP technician being improperly trained in that he was unaware of potential hazards in the area, and (3) the containment vessel sump area access controls being similar to other less hazardous high radiation areas (i.e., there were no special controls for key issuance).

The shift foreman gave the RO the key to the area without a specific radiological control briefing or warning. The shift foreman was aware that the thimbles were withdrawn and should have known the hazards that then existed. He should not have issued the key without assurance that adequate controls would be in place, including issuance of an RWP. IE Information Notice (IN) 82-51 stated that entry into radiation fields of the magnitude that exist in the reactor cavity seriously jeopardizes the health and safety of personnel. Any individual likely to enter the reactor cavity area, including all senior reactor operators (SROs) should be cognizant of this information. IN 82-51 specified that SROs should be informed of reactor cavity hazards because they frequently make the decision whether a cavity entry is needed, and supervise facility operations. IN 82-51 further stated that:

> "A particular concern of the NRC is that the person charged with the responsibility for implementing these controls, the Shift Supervisor, has frequently been the individual directly involved.... It appears that Shift Supervisors and other licensed senior reactor operators should exert greater control over reactor cavity entries if serious over exposures are to be avoided."

In addition, any individual entering the reactor cavity or similarly hazardous area must be informed of the radiation hazards and controls to be implemented.

The RO told the HP technician he needed HP coverage to check for leaks around the reactor vessel. The HP technician then unlocked the bay doors to provide access to the sump entrance. Before granting access, the HP technician should have ensured that the operator met all of the radiological control requirements for entry into the reactor cavity area and for the task the operator intended to perform. This was not done. Also, the HP technician should have ensured that he was personally prepared before committing to provide coverage. If at any point either the HP technician or RO found conditions requiring controls or protective equipment items that were unavailable at the work site, work should have ceased until needed controls or equipment were in place. These preparations include a clear understanding of the radiological conditions, controls required, and equipment he will need such as a respirator and air sampler. This was not done.

As the licensee points out, the HP technician then failed to act after reading the second posting requiring that the RC foreman be contacted prior to entry to the sump area. In addition, radiological warning signs are required to be conspicuously posted. This sign was not posted as conspicuously as it should have been.

The RO then went into the sump by himself after the technician had surveyed the area above the first platform. The radiation level in the area surveyed was substantially less than that in the area where the RO entered. The HP technician did not enter the area to do an adequate survey because he did not have a respirator. Once he realized that he could not accompany the RO he should have halted the entry. He also failed to survey all areas to be entered by the RO and to perform an air survey. Furthermore, neither the RO nor HP technician recognized that he should have an RWP.

The event was, in part, caused by the failure of the shift foreman, the RO and the HP technician to perform in an adequate manner. The failure of trained personnel to adhere to established procedures and policies, and the failure of a supervisor to detect a degraded situation in this respect, all contributed to the potentially radiological hazardous entry. In addition, the event was caused by the fact that the on-going program for improvement in the area of radiological protection had not yet been completed.

B. Licensee Comments: The shift foreman's administrative control of a locked high radiation area to preclude any potential for excessive radiation exposure is provided by the Key Control System and radiation postings.

NRC Evaluation: The person controlling access to a high radiation area must be responsible for ensuring that persons he permits to have access are informed of the radiological hazards and have or will satisfy all entry requirements. This was not done. There was no briefing of the RO by the SRO regarding the radiological hazards and there was no RWP issued for the work. This is indicative of poor personnel performance. Plant procedures did not require the shift foreman to approve the RWP. This is an indication that applicable administrative controls were inadequate.

C. Licensee Comments: The necessity to follow instructions on radiological postings and the conditions for which a nonroutine RWP is necessary are both subjects which are emphasized in the General Employee Training (GET) program. The GET exam includes questions specific to radiological hazards and postings. All three individuals involved successfully completed the GET exam within the past year. In addition, the shift foremen and RO involved in the event received training on radiological postings during their annual SRO/RO training/retraining classes. CPL reviewed IN 82-51 describing similar events at other utilities with the HP personnel and the SROs. Also, the shift foreman and RO are required to review the "Radiation Control Manual" each year. Procedures covering radiological postings and the issuance of nonroutine RWPs are contained in the "Radiation Control Manual." Thus, the three involved individuals had received adequate training to deal with the conditions they encountered and had demonstrated their comprehension of these matters by successfully completing their GET exams.

NRC Evaluations: The three individuals did receive adequate training regarding radiation protection procedures. However, the fact that the RO and the shift foreman had erroneous understandings of the magnitudes of the radiation fields that can be present in the sump area strongly indicates that significant improvements in training can be made. The resultant actions by the three individuals suggest that training without ever alert and responsible attitudes by operating personnel can lead to unacceptable actions as it did in this case.

D. Licensee Comment: It is not necessarily true that additional administrative controls would have ensured other plant management involvement in the decision to enter the reactor cavity sump. Plant management involvement would have been ensured if the posting at the entrance to the reactor cavity sump had been adhered to.

NRC Evaluation: The reactor cavity sump entry area was not controlled any differently than any other high radiation area, despite the higher hazard associated with it. This resulted in the RO and the HP technician treating the entry into the reactor cavity as a routine high radiation area entry. Their training and experience should have alerted them to the need for caution. The controls exercised should be commensurate with expected hazards.

E. Licensee Comment: When the company received notice of a similar event at another facility in IN 82-51, CPL took appropriate action in response to the Notice. CPL disagreed with the statement in the letter of March 13, 1984, transmitting this Notice of Violation, that CPL did not take adequate measures in response to IN 82-51. To the contrary, NRC personnel reviewed and concurred in CPL's actions, as discussed in IE Inspection Report No. 83-12 transmitted by letter dated May 26, 1983.

NRC Evaluation: Apparently, you reviewed your administrative controls and concluded they were adequate even though IN 82-51 mentioned special keys for the reactor cavity sump area, issuance of RWPs, and specialized training. The NRC review referenced in IE Inspection Report No. 83-12 consisted of verifying that you were in receipt of the notice and had distributed it to your staff for review.

NRC Summary Evaluation and Conclusion

The violation did occur as originally stated and is appropriately classified at Severity Level III. However, the licensee's corrective actions were extensive and comprehensive and included (1) reporting the event immediately upon its discovery, even though this event was not required to be reported, (2) promptly investigating the circumstances of this event and taking decisive action, including appropriate disciplinary actions and conducting extensive training sessions with operations, health physics, and management personnel concerning the specifics of this event and the necessity to ensure that all procedures are used and followed, and (3) renewed management attention and emphasis on the program for improving performance in the area of radiological protection. Because of these actions, I have decided to exercise my discretion and mitigate completely the civil penalty proposed in the Notice of Violation and Proposed Imposition of Civil Penalty dated March 13, 1984.

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

JUL 20 1984

Florida Power and Light Company
ATTN: Mr. J. W. Williams, Jr.
Vice President, Nuclear
Energy Department
P. O. Box 14000
Juno Beach, FL 33408

Gentlemen:

SUBJECT: PROPOSED IMPOSITION OF CIVIL PENALTIES EA 84-41
LOSS OF AUXILIARY FEEDWATER IN TWO INSTANCES AND INEFFECTIVE MANAGEMENT CONTROL OF OPERATIONS
(REFERENCE INSPECTION REPORT NOS. 50-250/84-04, 50-251/84-04, 50-250/84-09 AND 50-251/84-09)

Routine safety inspections were conducted by this office during the period of January 8-26, and February 22-29, 1984, of activities authorized by NRC Operating License Nos. DPR-31 and DPR-41 for the Turkey Point facility. The inspections included a review of the circumstances surrounding three instances of Limiting Condition for Operation (LCO) violations concerning the inoperability of the auxiliary feedwater (AFW) system, of which the licensee identified only one instance. Additionally, actions to correct and prevent recurrence of unreviewed safety-related electrical equipment modifications were documented in a Confirmation of Action Letter issued by Region II on February 16, 1984. On February 17, 1984 matters relating to the violations were discussed in an enforcement conference held at the Region II Office.

The violation described as Item 1.a in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Enclosure 1) involves the licensee's discovery that the 'A' and 'C' AFW pumps were inoperable and had apparently been so for approximately 21 days. An inadequate procedure was used to place the pumps back into service. As a result, the pump speed control was not returned to the proper setting. Additionally, the procedure did not require independent verification in the steps involving adjustment of the AFW pump governor manual speed control knob.

Item 1.b in the enclosed Notice involves another unsitisfactory aspect of AFW system operations. After heatup of Unit 3 on January 4 and 5, 1984, operators discovered that the minimum number of AFW pumps were not operable, but management did not take action to lower the Unit temperature to an allowed value. Similarly, during the heatup of Unit 3 on February 23, 1984, plant operators determined that two of the required three AFW pumps were inoperable. Despite this, the heatup continued until the Plant Nuclear Safety Committee (PNSC) completed its review of the relevant circumstances and terminated the startup.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The NRC is concerned that these violations of regulatory requirements could have led to consequences not contemplated by the FSAR during a credible accident scenario. Specifically, although it appears that sufficient core cooling could have been supplied to both units by the single operable AFW pump in each event, had the power history of the Unit been different, a single pump could have been inadequate. NRC is also concerned about FP&L's inadequate implementation of its independent verification program described in your December 26, 1980 letter to NRC. It appears that effective implementation of the independent verification program could have precluded both instances of inoperability. Therefore, a Notice of Deviation is enclosed as Enclosure 2 for the failure to satisfy your commitment of December 26, 1980 that was augmented by your letter of June 12, 1981 to have operation verification procedures implemented by July, 1982.

Item 2 in the enclosed Notice contains numerous examples of failures to follow procedures including failure to perform adequate post-trip reviews, failure to conduct adequate evaluations of unreviewed safety questions, and failure to control activities affecting quality. This item contains eight separate instances where regulatory requirements were not met.

Item 3 in the enclosed Notice involves a failure to conduct an adequate review of a design change as required by Technical Specifications and failure to control maintenance activities and operational activities which led to a degradation of electrical equipment which contributed to events on February 12 and 16, 1984 involving losses of off-site power.

These events are attributed to insufficient management oversight and have been the subject of several senior level management meetings. As a result, the licensee has devoted a significant amount of attention to the development of the "Turkey Point Plant Performance Enhancement Program." The licensee's commitments with regard to this program are being confirmed by Order. The implementation of this program will be examined during future inspections.

To emphasize the need for effective control of all phases of operation at the Turkey Point facility, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of One Hundred and Fifty Thousand Dollars ($150,000) for the violations described in the enclosed Notice. All of the violations have been categorized at Severity Level III in accordance with the NRC Enforcement Policy, 10 CFR 2, Appendix C.

The base civil penalty for a Severity Level III violation is $40,000. Item 1 in the Notice has been increased 25% because of the multiple examples cited. Additionally, a similar event was the subject of a civil penalty action on August 25, 1983 (see Inspection Report 50-250/83-15 and Enforcement Action, EA 83-49). Because of this previous enforcement action involving both the AFW system and independent verification, I have increased the civil penalty an additional 25%, for a total penalty for Item 1 of $60,000. Item 2 in the Notice, has also been increased 25% because of the multiple examples cited. The base civil penalty of $40,000 has been proposed for Item 3.

JUL 20 1984

You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. Your response should specifically address the corrective actions taken or planned with regard to the violations described in the Notice of Violation. In your response, appropriate reference to previous submittals is acceptable.

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

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

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

Sincerely,

Robert W Martin for

James P. O'Reilly
Regional Administrator

Enclosures:
1. Notice of Violation and Proposed Imposition of Civil Penalties
2. Notice of Deviation
3. Report Nos. 50-250/84-04, 50-251/84-04, 50-250/84-09, and 50-251/84-09)

cc w/encls:
K. N. Harris, Vice President
Turkey Point Nuclear Plant
C. J. Baker, Plant Manager
Turkey Point Nuclear Plant

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Florida Power and Light Company
Turkey Point Nuclear Plant

Docket Nos. 50-250
50-251
License Nos. DPR-31
DPR-41
EA 84-41

As a result of the inspections conducted on January 8-26, 1984, and on February 22-29, 1984, and in accordance with the NRC Enforcement Policy, 10 CFR 2, Appendix C, several violations of NRC requirements were identified.

During routine surveillance testing on January 4, 1984, the 'A' auxiliary feedwater (AFW) pump failed to develop the required discharge pressure because the governor manual speed control knob had been incorrectly positioned following the previous performance of monthly surveillance on December 5, 1983 and subsequent post-maintenance tests which occurred through December 14, 1983. Approximately four and one-half hours later on January 5, 1984, the 'C' AFW pump was tested and also failed. Consequently, only the 'B' AFW pump was operable from December 14, 1983 to January 5, 1984. Therefore, the 72-hour action statement for the limiting condition for operation (LCO) was exceeded on or before December 17, 1983, when only one of the required two AFW pumps was operable with Unit 4 operating at 100% power. This situation existed until January 5, 1984, when the 'A' AFW pump was restored to operability. Although the AFW surveillance had been revised to incorporate independent verification as a corrective action for a previous violation of NRC requirements described in a Notice of Violation and Proposed Imposition of Civil Penalty dated August 15, 1983, EA 83-49, the surveillance procedure failed to require independent verification in the step involving adjustment of the AFW pump governor manual speed control knob, which reset the pump governor for manual operation. Also, there was no requirement to document any other AFW pump manipulations such as post-maintenance testing as performed in the days following December 5, 1983 until December 14, 1983.

A second AFW system LCO violation occurred on January 4, 1984, when Unit 3 was heated above 350°F with Unit 4 at power. Although only one AFW pump was identified as available, plant management took no action to cool down to meet the LCO. Again on February 23, 1984, with Units 3 and 4 in non-power operations above 350°F and with the operator aware that only the 'A' AFW pump was operable, the heatup of Unit 3 continued for a period of approximately two and a half hours. In the second instance, the 'B' AFW pump was taken out of service because the pump differential pressure cell failed. The 'C' AFW pump was inoperable, due to a testing failure. This situation violated Technical Specification 3.8.4.b requiring three operable AFW pumps.

In addition, numerous examples of failures to follow procedures were identified including failure to perform adequate post-trip reviews, failure to conduct adequate evaluations of unreviewed safety questions, and failure to control activities affecting quality. Eight separate instances were identified where regulatory requirements were not met.

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

1. a. Technical Specification 3.8.5.a requires the reactor to be shut down and the reactor coolant temperature reduced below 350°F, if one of the required two AFW pumps for single unit power operation is not restored to operability within 72 hours.

   Contrary to the above, on or before December 17, 1983, the 72-hour single unit power operation action statement to restore operability of the required AFW pump was exceeded. Auxiliary feedwater pump undocumented post-maintenance testing conducted between December 5, and December 14, 1983 rendered the 'A' and 'C' AFW pumps inoperable by the mispositioning of the governor manual speed knob. This situation existed until January 5, 1984, when the situation was identified by the licensee and the 'A' AFW pump was restored to operability.

   b. Technical Specification 3.8.4.b requires three operable AFW pumps and associated flow paths for dual unit operation when the reactor coolant is heated above 350°F.

   Contrary to the above, on January 4, 1984, Unit 3 was heated above 350°F with Unit 4 at power with only one auxiliary feedwater pump operable, and plant management took no action to reduce temperature to meet the LCO. This violation occurred again on February 23, 1984 when Unit 3 was heated from approximately 400°F to 520°F with licensee management concurrance with 'B' and 'C' AFW pumps already known to be inoperable, although Unit 4 was in non-power operation above 350°F.

   This is a Severity Level III violation (Supplement I).
   (Civil Penalty - $60,000)

2. a. Technical Specification 6.8.1 requires the licensee to establish, implement, and maintain written procedures that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANSI N18.7-1972 and Appendix A of Regulatory Guide 1.33, Revision 2.

   Contrary to the above, the licensee failed to provide adequate procedures or to control the operation of safety-related equipment. The following examples constitute a breakdown in management control of plant operations:

   (1) On February 23, 1984, system alignment procedures did not exist to specify the positioning of the several trains of air and nitrogen supply valves attendant to each of the AFW flow control valves in accordance with Operating Procedure 7300.3, Auxiliary Feedwater System Operating Instructions.

(2) The plant work order for controlling the replacement of reactor protection system relays on January 9, 1984 and the procedure referenced, OP 0732 QC Check and Replacement of BFD/NBFD Relays in Reactor Protection and Safety Safeguards Systems, did not establish positive control over the sequence of operations. This resulted in a challenge to a reactor safety system and a trip of Unit 3.

(3) The licensee failed to adequately check and correct the non-inking of the post-accident trend recorder pens, in accordance with AP 0103.2 duties and responsibilities of operators and shift techinicians on shift and maintenance of operating logs and records, including specifically PR-4-6306B, containment pressure low, which had not been inking from 6 p.m. on January 17 to approximately 10 a.m. on January 18, 1984. The operator initialed that the recorders were checked at 9 p.m. on January 17, 1984, and at 1 a.m., 5 a.m., and 9 a.m. on January 18, 1984.

(4) On December 12, 1983, an unreviewed safety question evaluation was not initiated in accordance with AP 0103.3 control and use of temporary systems nor were compensatory measures taken, although changes occurred to the facility as described in the FSAR when the automatic fill for the diesel generator day tank was disabled for maintenance.

(5) The licensee failed to establish a procedure or instruction to control documents which were placed in the "Tank Book." The "Tank Book," was placed in the control room for use by plant operators and affected the operation of safety-related equipment.

(6) Post-reactor trip reviews in accordance with AP 0103.16 duties and responsibilities of the STA and ONOP 0208.1 Shutdown Resulting from Reactor Trip or Turbine Trip, were inadequately performed in the following instances:

(a) On January 8, 1984 the post-trip reviews for the 7:35 a.m. trip of Unit 3, did not discuss safety injection. However, Licensee Event Report (LER) 50-250/84-02 stated that engineering safety feature actuations occurred.

(b) The post-trip for the February 12, 1984 trip of Unit 4, reported in LER 50-251/84-01 did not consider the relevant switchyard breaker interlock failure between breakers 4AC01 and 4AC16 in determining the root cause.

(c) The post-trip reviews for the February 16, 1984 trips of Units 3 and 4, listed only 4AC01 protection relay actuation and 4AC01 protection relay failure respectively.

(7) On February 24, 1984 maintenance work was performed on equipment affecting safety-related plant operations without a detailed PWO, an applicable procedure, or the control room being informed when 'B' AFW pump dp cell was reinstalled.

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

3. Technical Specification 6.5.1.6(d) requires the Plant Nuclear Safety Committee (PNSC) to review all proposed changes or modifications to plant systems or equipment that affect nuclear safety.

Technical Specification 6.5.1.7(b) requires the PNSC to render determinations in the written PNSC meeting minutes of items with regard to whether or not each item considered under 6.5.1.6(d) constitutes an unreviewed safety question.

Contrary to the above, the design change incorporating Plant Change/Modifications 82-97, -99, -100, and -101 changing the load configuration of safety-related busses as described in the FSAR was not reviewed by the PNSC and, consequently, an unreviewed safety question determination was not documented by the PNSC. This failure contributed to two losses of off-site power on February 12 and 16, 1984.

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

Pursuant to the provisions of 10 CFR 2.201, Florida Power and Light Company is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, with a copy to this office, within 30 days of the date of this Notice, a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violations; (2) the reasons for the violations if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, the response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Florida Power and Light Company may pay the civil penalties in the amount of One Hundred and Fifty Thousand Dollars ($150,000) for the violations, or may protest imposition of the civil penalties in whole or in part by a written answer. Should Florida Power and Light Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties in the amount proposed above. Should Florida Power and Light Company elect to file an answer in accordance with 10 CFR 2.205

protesting the civil penalty, such answer may: (1) deny the violations listed in this Notice in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty. In requesting mitigation of the proposed penalty, the five factors addressed in Section V(B) of 10 CFR Part 2, Appendix C, as revised, 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. Florida Power and Light Company's attention is directed to the other provisions of 10 CFR 2.205 regarding the procedure for imposing a civil penalty.

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

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY
ROBERT D. MARTIN /for
James P. O'Reilly
Regional Administrator

Dated at Atlanta, Georgia
this 20th day of July 1984

NOTICE OF DEVIATION

Florida Power and Light Company
Turkey Point 3 and 4

Docket Nos. 50-250
50-251
License Nos. DPR-31
DPR-41
EA 84-41

The following deviations were identified during an inspection conducted on January 8-26, 1984.

Florida Power and Light Company's letter dated December 26, 1980, in response to NRC letter of October 31, 1980 regarding NUREG-0737 implementation status of post-TMI requirements, stated:

> "Due to the manpower requirements of our current refueling outage, and the need for interfacing activity with both our nuclear plant this requirement [operation verification procedure (I.C.6)] will be implemented by 3/1/81."

Furthermore, Florida Power and Light Company's letter dated June 12, 1981 committed to augment their procedures to fully implement NUREG-0737, Item I.C.6 so that "... new procedures incorporating independent verification will be retained and independent verification will be factored into all applicable surveillance procedures... as part of the yearly procedure review process."

Contrary to the above, implementation of NUREG-0737, Item I.C.6 has not been completed as of January 26, 1984.

Please provide, in writing within 30 days of the date of this Notice, a description of corrective actions regarding these deviations, actions taken to avoid further deviations, and the dates when these actions were or will be completed.

Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

JUL 20 1984

Date: _____

FLORIDA POWER & LIGHT COMPANY

August 20, 1984
L-84-213

Mr. James P. O'Reilly
Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street N.W., Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

Re: Turkey Point Unit 3 and 4
Docket Nos. 50-250 and 50-251
Proposed Civil Penalty EA 84-41
Inspection Report 84-04/09

Florida Power and Light Company has reviewed the subject notice of violation and proposed imposition of civil penalties. A response to each of the specific items there referred to is enclosed.

In addition, the Turkey Point Plant Performance Enhancement Program which has been the subject of senior level management meetings between representatives of FPL and Region II, has been developed and put into effect to adress concerns relating to management control of operations. The program provides overall corrective action designed to reduce the likelihood of the future occurrence of procedural violations of the type cited in the notice of violation.

In accordance with your letter, a check for the full amount of the penalty is enclosed.

There is no proprietary information in the report.

Very truly yours,

J. W. Williams, Jr.
Group Vice President
Nuclear Energy Department

JWW/RDH/awt/T21:1

Enclosures

cc: Harold F. Reis, Esquire

ATTACHMENT

Re: Turkey Point Units 3 and 4
Docket No. 50-250, 50-251
Proposed Civil Penalty EA 84-41
IE Inspection Report 84-04/09

FINDING 1.a:

Technical Specification 3.8.5.a requires the reactor to be shut down and the reactor coolant temperature reduced below 350°F, if one of the required two AFW pumps for single unit power operation is not restored to operability within 72 hours.

Contrary to the above, on or before December 17, 1983, the 72-hour single unit power operation action statement to restore operability of the required AFW pump was exceeded. Auxiliary feedwater pump undocumented post-maintenance testing conducted between December 5, and December 14, 1983, rendered the 'A' and 'C' AFW pumps inoperable by the mispositioning of the governor manual speed knob. This situation existed until January 5, 1984, when the situation was identified by the licensee and the 'A' AFW pump was restored to operability.

FINDING 1.b.1:

Technical Specification 3.8.4.b requires three operable AFW pumps and associated flow paths for dual unit operation when the reactor coolant is heated above 350°F.

Contrary to the above, on January 4, 1984, Unit 3 was heated above 350°F with Unit 4 at power with only one auxiliary feedwater pump operable, and plant management took no action to reduce temperature to meet the LCO.

RESPONSE:

1) FPL concurs with the findings.

2) Between December 5, 1983 and January 3, 1984, there were no indications of the auxiliary feedwater (AFW) pumps being affected by mispositioning of the governor manual speed control knob, thus their operability was never in question in accordance with Technical Specification 3.8.5.a and Technical Specification 3.8.4.b. Based on this, Unit 4 continued at full power operation until January 5, 1984. On January 5, 1984, the mispositioning of AFW governor manual speed control knob was discovered while performing Operating Procedure 7304.1, Auxiliary Feedwater System Periodic Test. Immediate corrective actions were taken to correct the situation.

3) The following corrective actions were taken immediately:

   a) Upon failure of the 'A' AFW pump, troubleshooting revealed the governor manual speed control knob to be mispositioned. The knob was then properly positioned.

   b) The 'A' AFW pump was then successfully tested and placed back in service.

c) Subsequently, the 'C' AFW pump was then tested in accordance with the procedure and also failed. Again, troubleshooting discovered the governor manual sped control knob to be mispositioned. The knob was then properly positioned.

d) The 'C' AFW pump was then successfully tested and placed back in service.

e) The 'B' AFW pump was successfully tested with no need to reposition the governor manual speed control knob.

4) To preclude recurrence, the following actions were taken:

a) An additional check was added to the Nuclear Turbine Operator's log to check the knob position once per shift.

b) Because inadequate lighting was addressed as an added factor to this incident, lighting has been installed in the auxiliary feedwater pump area.

c) A review was made to check that there were no similar devices which could disable other Engineer Safeguards Equipment without indication to the operators. No devices of this type were found that were not already addressed in procedures.

d) Extensive training for turbine operators on manual governor speed control of the Auxiliary Feedwater System was conducted.

e) Independent verification of the speed control knob was added to Operating Procedure 7304.1, AFW System Periodic Test and 0209.3, Inservice Testing for Auxiliary Feedwater Pumps.

f) Increased the efforts of procedures review to identify similar weaknesses.

g) Independent verification policy training and real time implementation. This is an ongoing effort as part of the Performance Enhancement Program.

h) Increased plant awareness of guidelines on documenting deficiencies discovered during operations and testing. This includes the inspection and testing of similar equipment when malfunctions are discovered.

i) Increased plant awareness of procedural and documentation requirements when conducting post maintenance testing of safety related equipment.

j) A Task Team was formed to address all areas of the AFW System.

This event, including corrective actions, was described in Licensee Event Report 250-84-004 submitted to the NRC on February 22, 1984.

5) Full compliance was achieved on May 15, 1984.

FINDING 1.b.2:

On February 23, 1984, Unit 3 was heated from approximately 400°F to 520°F with the licensee management concurrence with 'B' and 'C' AFW pumps already known to be inoperable, although Unit 4 was in non-power operation above 350°F.

RESPONSE:

1) FPL concurs with the finding.

2) The reason for the finding was failure of personnel to identify that a Limiting Condition for Operation (LCO) was entered which required one unit to be cooled down below 350°F with less than 3 auxiliary feedwater (AFW) pumps operable in accordance with Technical Specification (TS) 3.8.4.b.

3) A temporary system alteration was reviewed and approved to isolate the 'B' AFW pump dp cell 2402. Following isolation of the dp cell, the 'B' AFW pump was tested satisfactorily and placed back in service. An On the Spot Change was issued to Operating Procedure 7304.1, Auxiliary Feedwater System Periodic Test, and the 'C' AFW pump was tested satisfactorily. A subsequent review by plant management of this event revealed that an immediate cooldown to below 350°F on Unit 3 should have been initiated as per TS 3.8.4.b. During the management review, the AFW pumps were placed back in service.

4) To preclude recurrence, a revision has been submitted to Technical Specification 3.8 to clarify the requirements for AFW System operability during unit heatup. The specification has been written to describe the system by means of operable trains and to provide specific action if requirements are not met during unit heatup.

5) Full compliance was achieved on June 15, 1984.

FINDING 2:

Technical Specification 6.8.1 requires the licensee to establish, implement, and maintain written procedures that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANSI N18.7-1972 and Appendix A of Regulatory Guide 1.33, Revision 2.

Contrary to the above, the licensee failed to provide adequate procedures or to control the operation of safety related equipment. The following examples constitute a breakdown in management control of plant operations:

FINDING 2.a.1:

On February 23, 1984, system alignment procedures did not exist to specify the positioning of the several trains of air and nitrogen supply valves attendant to each of the AFW flow control valves in accordance with Operating Procedure 7300.3, Auxiliary Feedwater System Operating Instructions.

RESPONSE:

1) FPL concurs with the finding.

2) The reason for the finding was the lack of administrative controls to specify the positioning of the instrument air and nitrogen backup to the auxiliary feedwater (AFW) flow control valves.

3) A Task Team was immediately formed and all available information relating to the operation of the flow control valves gathered. Field checking of the system revealed several discrepancies in the installed configuration of the Nitrogen Back-up System, alarm setpoints were changed, valves were numbered and temporarily labeled, procedures were updated, functional tests were performed and operator training was conducted within 24 hours for each unit.

4) The following actions have been done to prevent recurrence:

   a) Drawing 5610-M-399 has been updated to reflect changes to the AFW flow control valves from the AFW Task Team effort,

   b) Operating Procedure 7300.3, Auxiliary Feedwater System - Operating Instructions, has been revised to include air and backup nitrogen valves in the AFW valve line-up list.

   c) Operating Procedure 7300.2, Auxiliary Feedwater System - Nitrogen Back-up System Operation, has been revised to describe the desired valve manipulations to correctly line up the system.

5) Full compliance was achieved on May 7, 1984.

FINDING 2.a.2:

The plant work order for controlling the replacement of reactor protection system relays on January 9, 1984, and the procedure referenced, OP 0732 QC Check Replacement of BFD/NBFD Relays in Reactor Protection and Safety Safeguards Systems, did not establish positive control over the sequence of operations. This resulted in a challenge to a reactor safety system and a trip of Unit 3.

RESPONSE:

1) FPL concurs with the finding.

2) The reason for the finding was inadequate controls established by existing procedures for the interfacing of maintenance procedures and operating procedures. The root cause of the reactor trip was operator error while performing Operating Procedure 1004.2.

3) Changes were made to Operating Procedure 1004.2, Reactor Protection System - Periodic Test, which provide positive control over the sequence of operator actions when taking a RPS channel out of service. In addition, proper identification tags were placed on the RPS instrumentation. A review of this incident during the requalification sessions for licensed operators was conducted.

4) The Performance Enhancement Program has established a review of safety related maintenance procedures to ensure that correct procedure sequencing is adhered to. The Plant Manager has directed that all maintenance procedures be reviewed prior to use to ensure that all requirements are complied with. The Quality Control Supervisor has counseled personnel on procedure requirements and review of safety related plant work orders to ensure that work is properly interfaced in plant operations.

5) Full compliance was achieved on June 1, 1984.

FINDING 2.a.3:

The licensee failed to adequately check and correct the non-inking of the post-accident trend recorder pens, in accordance with AP 0103.2 duties and responsibilities of operators and shift technicians on shift and maintenance of operating logs and records, including specifically PR-4-6306B, containment pressure low, which had not been inking from 6 p.m. on January 17 to approximately 10 a.m. on January 18, 1984. The operator initialed that the recorders were checked at 9 p.m. on January 17, 1984, and at 1 a.m., 5 a.m., and 9 a.m. on January 18, 1984.

RESPONSE:

1) FPL concurs with the finding.

2) The reason for the finding was an oversight on the part of the operators on shift.

3) Specific instructions were given to the individual operators involved to assure their understanding of the consequences of their actions with regards to procedural compliance. Operations personnel were counseled on the importance of procedural compliance and management action in the form of additional training sessions and memorandums to all personnel were taken to assure adequate compliance to procedures. A verbatim compliance policy was established and is now part of Administrative Procedure 0103.2, Responsibilities of Operators and Shift Technicians on Shift and Maintenance of Operating Logs and Records.

4) To preclude recurrence, the Quality Control inspectors on shift periodically monitor the marking of control room recorders. The marking pens of the recorders in question were determined to be unreliable and have been replaced with improved marking pens.

5) Full compliance was achieved on August 17, 1984.

FINDING 2.a.4:

On December 12, 1983, an unreviewed safety question evaluation was not initiated in accordance with AP 0103.3, Control and Use of Temporary Systems, nor were compensatory measures taken, although changes occurred to the facility as described in the FSAR when the automatic fill for the diesel generator day tank was disabled for maintenance.

RESPONSE:

1) FPL concurs with the finding.

2) The reason for the finding was lack of administrative controls for controlling Temporary System Alterations (TSA) on non-electrical systems.

3) The hand loader to CV-2046A was removed immediately.

4) Development and implementation of Administrative Procedure 0103.3, Control and Use of Temporary System Alterations, has been completed to provide instructions for the control and record keeping requirements necessary to assure that TSAs are properly evaluated to allow safe plant operations. This procedure interfaces and complements existing plant controls and procedures concerning the removal and maintenance of plant equipment. Plant personnel were trained on the purpose and correct application of this procedure.

5) Full compliance was achieved on March 1, 1984.

FINDING 2.a.5:

The licensee failed to establish a procedure or instruction to control documents which were placed in the 'Tank Book'. The 'Tank Book' was placed in the control room for use by plant operators and affected the operation of safety related equipment.

RESPONSE:

1) FPL concurs with the finding.

2) The reason for the finding was that this tank book was established to provide information only to operators and was not recognized to be a controlled document.

3) The tank book was removed from the control room.

4) Those documents which affect quality were included in the Plant Curve Book as controlled documents. Administrative Procedure 0103.36, Control of Operator Aides, was revised to provide instructions for the posting, control, and removal of operator aides and describe the required authorization documentation and review to ensure operator aides are current, complete, and necessary.

5) Full compliance was achieved on June 14, 1984.

FINDING 2.a.6:

Post reactor trip reviews in accordance with AP 0103.16, Duties and Responsibilities of the STA, and ONOP 0208.1, Shutdown Resulting from Reactor Trip or Turbine Trip, were inadequately performed in the following instances:

(a) On January 8, 1984, the post trip reviews for the 7:35 a.m. trip of Unit 3 did not discuss safety injection. However, Licensee Event Report (LER) 50-250/84-02 stated that engineering safety feature actuations occurred.

(b) The post trip review for the February 12, 1984, trip of Unit 4, reported in LER 50-251/84-01 did not consider the relevant switchyard breaker interlock failure between breakers 4AC01 and 4AC16 in determining the root cause.

(c) The post trip reviews for the February 16, 1984, trips of Units 3 and 4, listed only 4AC01 protection relay actuation and 4AC01 protection relay failed, respectively.

RESPONSE:

1) FPL concurs with the finding.

2) The reason for the finding was inadequate procedural guidance while conducting post trip reviews.

3) For the February 16, 1984 Unit 3 and 4 reactor trips, the post trip reviews were evaluated by plant management to assure adequacy prior to unit start-up. For the January 8, 1984, and February 12, 1984 events, there were no immediate corrective actions taken based on existing procedures at the time of the event.

4) The Procedure Upgrade Program reviewed and updated Off-Normal Operating Procedure 0208.1, Shutdown Resulting from Reactor Trip or Turbine Trip, to expand on relevant information for conducting a post trip review. This update included:

   a) The addition of safety system actuations as one of the criteria for performing the review, and

   b) Review and concurrence by plant management prior to unit restart.

Personnel required to perform post trip reviews have been made aware of the procedure change. Additional training was given to personnel required to perform post trip reviews.

5) Full compliance was achieved on May 31, 1984.

FINDING 2.a.7:

On February 24, 1984, maintenance work was performed on equipment affecting safety related plant operations without a detailed PWO, an applicable procedure, or the control room being informed when 'B' AFW pump dp cell was reinstalled.

RESPONSE:

1) FPL concurs with the finding.

2) The reason for the finding was lack of adequate administrative controls for controlling temporary system alterations.

3) Maintenance personnel were counseled on the importance of keeping the control room operators advised of any work in progress on systems that affect plant operation.

4) Development and implementation of Administrative Procedure 0103.3, Control and Use of Temporary System Alterations, has been completed to provide instructions for the control and record keeping requirements necessary to assure that TSAs are properly evaluated to allow safe plant operations. This procedure interfaces and complements existing plant controls and procedures concerning the removal and maintenance of plant equipment. Plant personnel were trained on the purpose and correct execution of this procedure.

5) Full compliance was achieved on March 1, 1984.

FINDING 3:

Technical Specification 6.5.1.6(d) requires the Plant Nuclear Safety Committee (PNSC) to review all proposed changes or modifications to plant systems or equipment that affect nuclear safety.

Technical Specification 6.5.1.7(b) requires the PNSC to render determinations in the written PNSC meeting minutes of items with regard to whether or not each item considered under 6.5.1.6(d) constitutes an unreviewed safety question.

Contrary to the above, the design change incorporating Plant Change/Modifications 82-97, -99, -100, and -101 changing the load configuration of safety related busses as described in the FSAR was not reviewed by the PNSC and, consequently, an unreviewed safety question determination was not documented by the PNSC. This failure contributed to two losses of off-site power on February 12 and 16, 1984.

RESPONSE:

1) FPL concurs with the finding.

2) The reason for the finding was that administrative controls in place at the time required the Plant Nuclear Safety Committee (PNSC) to review Plant Change/Modifications (PC/M) classified as nuclear safety related and the referenced PC/Ms were classified as non-nuclear safety related, QA/QC required.

3) Following the reactor trip on February 16, 1984, the PNSC and the Company Nuclear Review Board performed a review on all PC/Ms designed to implement the Auxiliary Power Upgrade modifications. No safety concerns were encountered and, therefore, none of the PC/Ms represented an unreviewed safety question.

   This review was conducted prior to restart of both units.

4) Administrative controls have been implemented by which the PNSC reviews all PC/Ms regardless of classification.

5) Full compliance was achieved on April 26, 1984.

NOTICE OF DEVIATION:

Florida Power and Light Company's letter dated December 26, 1980, in response to NRC letter of October 31, 1980, regarding NUREG-0737 implementation status of post-TMI requirements, stated:

> "Due to the manpower requirements of our current refueling outage, and the need for interfacing activity with both our nuclear plant, this requirement [operation verification procedure (I.C.6)] will be implemented by 3/1/81."

RESPONSE:

1) FPL concurs with the deviation.

2) The reason for the deviation was inadequate implementation of NUREG-0737, Item I.C.6 requirements.

3) Upon identification of the deficiency, plant management initiated actions to fully implement the requirements of NUREG-0737, Item I.C.6.

4) An independent verification policy has been established by the issuance and implementation of Administrative Policy 0103.31, Independent Verification.

   The Procedure Development Group of the Procedure Upgrade Program will continue to implement this independent verification policy for all new and upgraded procedures.

5) Full compliance was achieved on April 20, 1984.

STATE OF FLORIDA)
) ss.
COUNTY OF DADE)

J. W. Williams, Jr., being first duly sworn, deposes and says:

That he is Group Vice President of Florida Power & Light Company, the licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said Licensee.

J. W. Williams, Jr.

Subscribed and sworn to before me this

20 day of August, 1984.

NOTARY PUBLIC, in and for the County of Dade, State of Florida.

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXP. FEB 14,1988
BONDED THRU GENERAL INS. UND.

My commission expires: 2-14-88

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

MAR 1 3 1984

Docket No. 50-331
EA 84-9

Iowa Electric Light and Power
Company
ATTN: Mr. Lee Liu
President and Chief
Executive Officer
IE Towers
P. O. Box 351
Cedar Rapids, IA 52406

Gentlemen:

This refers to the safeguards inspection conducted by Messrs. G. L. Pirtle and T. J. Madeda of the NRC Region III staff on December 20-22, 1983, and January 19, 1984, of activities at the Duane Arnold Energy Center authorized by NRC Operating License No. DPR-49. The results of this inspection were discussed on January 13, 1984 during an Enforcement Conference held at the NRC Region III Office between Mr. S. Tuthill and other membefs of your staff and Mr. A. Davis and other members of the Region III staff.

This inspection revealed that a vital area barrier contained a 9 x 12 foot hole due to the earlier removal of louvers from one of the walls. This situation existed from 7:59 p.m., December 20, 1983 to 6:50 a.m., December 21, 1983. We are concerned that the access control measures in place at the time of the incident did not provide the level of protection described in your security plan.

To emphasize the need to ensure that the approved security plan is followed and that you are cognizant of the potentially serious consequences of possible unauthorized entry into an area containing vital equipment, we propose to impose a civil penalty for Item 1 as set forth in the Notice of Violation enclosed with this letter. No civil penalty is proposed for the three additional violations.

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The violations in the enclosed Notice have been categorized at the severity levels described in the General Policy and Procedure for NRC Enforcement Actions (10 CFR Part 2, Appendix C). The base penalty for a Severity Level III violation is $40,000. However, in accordance with the NRC Enforcement Policy and after considering your prompt and extensive corrective action which included: an investigation pertaining to the incident, a search of the affected area by operations personnel, review of computer printouts for personnel access and alarms within the area, disciplinary action against the responsible supervisor, and termination of the policy for temporary designations of the vital area boundary, the amount of civil penalty has been reduced by 50%. Although you identified the violation, additional reduction of the civil penalty is not warranted because the violation existed undetected during an earlier shift. 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 Twenty Thousand Dollars.

A civil penalty could have been proposed for another Severity Level III violation identified in the inspection which involved the failure to adequately control and protect documents containing Safeguards Information. However, because you identified the violation and reported it to the NRC even though such reporting is not required, and because of your prompt and extensive corrective action, no civil penalty is being proposed for this violation.

In your response to this letter, please follow the instructions in the Notice. Your response to Item 1 should specifically address corrective actions you have taken or plan to take for ensuring that access portals are adequately controlled.

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

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

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

Sincerely,

James G. Keppler
Regional Administrator

Enclosures:
1. Notice of Violation and Proposed Imposition of Civil Penalty
2. Inspection Report No. 50-331/83-19(DRMSP)
(UNCLASSIFIED SAFEGUARDS INFORMATION)

(See Attached Distribution List)

Iowa Electric Light and Power Company
April 12, 1984
S-84-07

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

Subject: Duane Arnold Energy Center
Docket No: 50-331
Op. License No: DPR-49
Response to Notice of Violation and Proposed Imposition of Civil Penalty

Reference: Letter, Mr. James C. Keppler, USNRC to Mr. Lee Liu, IEL&P, dated March 13, 1984

Dear Mr. DeYoung:

In accordance with 10 CFR 2.201, we submit this response to Mr. Keppler's letter. This letter and our response to Item I of the Notice of Violation (contained in Attachment 1) are submitted under oath and are true and correct to the best of my knowledge and belief.

We place great importance upon achieving full compliance with NRC regulations and requirements in each aspect of our nuclear activities. We have implemented extensive and comprehensive corrective action for the concerns you have identified.

After careful review of your letter, the pertinent circumstances, the NRC Enforcement Policy (47 Fed. Reg. 9,987 and 49 Fed Reg. 8,583) and NRC regulations and regulatory requirements, we have concluded that a valid basis exists for protesting imposition of a civil penalty in conjunction with the violation cited in Item I. Attachment 2 contains our protest in accordance with 10 CFR 2.205. Our responses to the other items cited in the Notice of Violation are set out in a separate submittal.

In summary, we believe that the violation is not appropriately classified as Level III. However, if it remains classified at Level III, it is only marginally so and the revised enforcement policy notes civil penalties are not usually imposed for such violations. Finally, extensive corrective

WHEN SEPARATED FROM ENCLOSURES, HANDLE THIS DOCUMENT AS DECONTROLLED

ATTACHMENT CONTAINS
SAFEGUARDS INFORMATION

General Office • P.O. Box 351 • Cedar Rapids, Iowa 52406 • 319/398-4411

APR 16 1984

actions, past performance, and prompt identification and reporting support full mitigation. The basis for these conclusions is provided in the attachments.

Attachments 1 and 2 contain information which has been classified and handled as Safeguards Information by the Licensee and, hence, is exempt from public disclosure pursuant to 10 CFR 73.21(c).

We emphasize the importance that we place on these matters. The corrective actions we have taken and these responses should demonstrate our dedication to maintaining high standards. We would also like to point out that the ability to operate the plant safely and the ability to achieve safe shutdown under any circumstance was not impaired.

IOWA ELECTRIC LIGHT AND POWER COMPANY

BY _____
Richard W. McGaughy
Manager, Nuclear Division

Subscribed and sworn to before me on this 12TH day of April 1984.

_____
Notary Public in and for the State of Iowa

RWM/WJM/dmb*
Attachment 1: Response to Item I of Notice of Violation
2: Protest of Civil Penalty and Request for Remission and Mitigation in Accordance with 10 CFR 2.205.

cc: W. Miller
L. Liu
S. Tuthill

Mr. James Keppler
Regional Administrator
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

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

JUL 17 1984

Docket No. 50-331
EA 84-9

Iowa Electric Light and Power
Company
ATTN: Mr. Lee Liu
President and Chief
Executive Officer
IE Towers
P.O. Box 351
Cedar Rapids, IA 52406

Gentlemen:

This refers to the letters dated April 12, 1984 from Iowa Electric Light and Power Company in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you with our letter dated March 13, 1984. Our letter concerned the violations noted during a physical protection inspection conducted on December 20-22, 1983 of the Duane Arnold Energy Center.

We have carefully considered your response and note that you admitted a violation of your Security Plan occurred in that access was not controlled in an area that was required to be protected. We have also considered your request for classification at a lower level of the violation that resulted in the proposed civil penalty and your request for mitigation of the proposed civil penalty. We have concluded, for the reasons given in the Appendix to the enclosed Order, that the proposed civil penalty violation has been classified at the correct severity level and that no adequate reasons were given to warrant mitigation of the civil penalty. Accordingly, we hereby serve the enclosed Order on Iowa Electric Light and Power Company imposing a civil penalty in the amount of Twenty Thousand Dollars. Your request for reconsideration of the two violations for which no civil penalty was proposed is being addressed in the second enclosure to this letter.

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The items discussed in the Appendix attached to the enclosed Order concern a subject matter which is exempt from disclosure according to Section 73.21(c)(2) of the NRC's "Rules and Regulations," Title 10, Code of Federal Regulations. This information must be handled and protected in accordance with the provisions of 10 CFR 73.21. Consequently, the Appendix to the Order and the attachment to your response will not be placed in the NRC's Public Document Room.

Sincerely,

"Original Signed By
R. C. DeYoung"

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosures:
Order Imposing Civil
Monetary Penalty
with Appendix
(UNCLASSIFIED SAFEGUARDS
INFORMATION)
Evaluation and Conclusion
(UNCLASSIFIED SAFEGUARDS
INFORMATION)
cc w/encls:
D. Mineck, Plant Superintendent
Nuclear
cc w/o encls:
Thomas Houvenagle, Iowa
Commerce Commission

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
IOWA ELECTRIC LIGHT AND POWER COMPANY	)	Docket No. 50-331
(Duane Arnold Energy Center)	)	License No. DPR-49
	)	EA 84-9

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Iowa Electric Light and Power Company, P.O. Box 351, Cedar Rapids, Iowa 52406 (the "licensee") is the holder of Operating License No. DPR-49 (the "license") issued by the Nuclear Regulatory Commission (the "Commission") which authorizes the licensee to operate the Duane Arnold Energy Center near Palo, Iowa in accordance with conditions specified therein. The license was issued on February 22, 1974.

II

A safeguards inspection of the licensee's activities under the license was conducted on December 20-22, 1983. As a result of this inspection, it appears that the licensee has not conducted its activities in full compliance with the conditions of its license. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated March 13, 1984. The Notice states the nature of the violation, the provisions of the Commission's requirements that the licensee violated, and

the amount of the civil penalty proposed for the violation. An answer to the Notice of Violation and Proposed Imposition of Civil Penalty, dated April 12, 1984, was received from the licensee.

III

Upon consideration of the licensee's reply to the Notice of Violation and arguments for mitigation of the proposed civil penalty, the Director, Office of Inspection and Enforcement, has determined for the reasons set forth in the Appendix to this Order that the penalty proposed for the violation identified in Section I of the Notice of Violation and Proposed Imposition of Civil Penalty should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of Twenty Thousand Dollars ($20,000) within thirty days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

V

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

(a) whether the licensee violated NRC requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty; and

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

FOR THE NUCLEAR REGULATORY COMMISSION

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 17 day of July 1984

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

JUL 6 1984

Docket/License: 50-387/NPF-14
50-388/NPF-22

EA No. 84-5

Pennsylvania Power & Light Company
ATTN: Mr. Jack Calhoun
Senior Vice-President, Nuclear
2 North Ninth Street
Allentown, Pennsylvania 18101

Gentlemen:

Subject: Notice of Violation and Proposed Imposition of Civil Penalty
(Inspection Report Nos. 50-387/83-24; 50-387/84-11; 50-388/84-19)

On December 13, 1983, March 20, 1984, and May 7, 1984, Enforcement Conferences were held with Mr. Bruce Kenyon and other members of your staff at the NRC Region I Office to review the circumstances associated with four apparent violations of NRC requirements which occurred at the Susquehanna Steam Electric Station, Units 1 and 2. Two of the violations, which were identified by members of your staff and reported to the NRC, were reviewed during an NRC inspection conducted at Unit 1 on November 7 - 10, 1983. The report of this inspection was sent to you on November 28, 1983. A third violation was identified by NRC inspectors and reviewed during a special NRC inspection conducted at Unit 1 on February 21-24, 1984. The report of this inspection was forwarded to you on March 8, 1984. The fourth violation, which also was identified by a member of your staff, occurred at Unit 2 and was reviewed during a special NRC inspection conducted on April 11-16. The report of this inspection was forwarded to you on May 1, 1984. At the enforcement conferences, the causes of the violations and corrective actions were discussed.

The violation at Unit 2, which is described in the enclosed Notice, involved the inoperability of one of four Source Range Monitors (SRM) during the loading of fuel bundles and the movement of control rods in the Unit 2 reactor vessel. During the time these reactor core alterations were being performed, the SRM was required by the technical specifications to be operable. The SRM was inoperable in that its reactor scram function had been bypassed.

The NRC is concerned that indication existed in the control room to alert operators that the SRM was bypassed, yet core alterations commenced based on a conclusion that the SRM was operable. The plant control room operator knew

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that the SRM channel in question was in the bypassed position but apparently did not recognize its significance in relation to technical specification requirements. Further, the indication that the SRM was bypassed existed through two shift turnovers before the SRM was declared inoperable, demonstrating a lack of adequate attention and response to control room indications by plant operators and supervision. The lack of adequate attention and response to control room indications had previously been discussed at an Enforcement Conference with Mr. Kenyon and other members of your staff on March 17, 1983, for a violation involving the inoperability of the Standby Gas Treatment System (SGTS). In that case, the SGTS was inoperable for approximately 24 hours and during that time alarms annunciated at a back panel in the control room but there was no response to those alarms by plant operators. That violation resulted in assessment of a $60,000 civil penalty on April 22, 1983.

The Unit 1 violations of NRC requirements involve three other examples of failures to adhere to technical specification requirements. The first Unit 1 violation involved entry into a condition specified in the technical specifications, namely, reactor steam dome pressure in excess of 150 psig, without satisfying the stated prerequisites. Specifically, the High Pressure Coolant Injection (HPCI) system was inoperable during reactor start-up. The second Unit 1 violation involved the inoperability, for approximately 51 hours, of the main condenser offgas explosive monitoring system in November 1983. The third Unit 1 violation involved the failure to demonstrate that remaining AC power sources were operable after one offsite power source became inoperable.

The violation involving the inoperable SRM on Unit 2 has been categorized as a Severity Level III violation in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised and published in the Federal Register on March 8, 1984 (49 FR 8583). To emphasize the importance of operator response to control room alarms and indications, and adherence to technical specification requirements, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of $75,000 for this violation. The base civil penalty amount for a Severity Level III violation is $50,000. However, the base amount has been increased by 50% because of previous inadequate attention and response to control room alarms and indications by operators. The Unit 1 violations have been categorized as Severity Level IV violations. However, all of the violations involved either ineffective response to indicators and annunciators or failure to recognize the applicability of technical specification requirements or both. I am concerned about the continuation of these problems at Susquehanna, and I will examine closely your response to this enforcement action and your corrective actions.

You are required to respond to the enclosed Notice and you should follow the instructions specified therein in preparing your response.

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

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

Sincerely,

James M. Allan

Thomas E. Murley
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
Norman W. Curtis, Vice President, Engineering and Construction - Nuclear
A. R. Sabol, Manager, Nuclear Quality Assurance
W. E. Barberich, Licensing Engineer
H. W. Keiser, Superintendent of Plant

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Pennsylvania Power and Light Company
Susquehanna Steam Electric Station,
Units 1 and 2

Docket Nos. 50-387
50-388
License Nos. NPF-14
NPF-22
EA 84-5

On November 7-10, 1983, February 21-24, 1984, and April 11-16, 1984, NRC inspections were conducted to review the circumstances associated with four violations of NRC requirements. Violations IA, IIB, and IIC were identified by the licensee and promptly reported to the NRC. Violation IIA was identified by NRC inspectors.

The Unit 2 violation involved an inoperable Source Range Monitor (SRM) while core alterations were being performed during initial fuel load of the reactor vessel. The SRM was inoperable in that its reactor scram function had been bypassed. The Unit 1 violations of NRC requirements involve three other examples of failures to adhere to technical specification requirements. The first Unit 1 violation involved entry into a condition specified in the technical specifications, namely, reactor steam dome pressure in excess of 150 psig, without satisfying the stated prerequisites. Specifically, the High Pressure Coolant Injection (HPCI) system was inoperable during reactor start-up. The second Unit 1 violation involved the inoperability, for approximately 51 hours, of the main condenser offgas explosive monitoring system in November 1983. The third Unit 1 violation involved the failure to demonstrate that remaining AC power sources were operable after one offsite power source became inoperable.

To emphasize the importance of operator response to control room alarms and indications, and adherence to technical specification requirements, the Nuclear Regulatory Commission proposes a civil penalty in the amount of $75,000 for the violation involving the inoperable SRM on Unit 2. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 March 8, 1984, and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295 and 10 CFR 2.205, the particular violation and the associated civil penalty are set forth in Section I below.

I. VIOLATION ASSESSED A CIVIL PENALTY

A. Technical Specification 3.9.2 requires that whenever the reactor is in Operational Condition 5 (Refueling), at least two Source Range Monitor (SRM) channels shall be operable and inserted to the normal operating level, with one of the required SRM detectors located in the quadrant where core alterations are being performed and the other SRM detector located in an adjacent quadrant.

Contrary to the above, between 4:28 p.m. on April 10, 1984, and 1:45 a.m. on April 11, 1984, core alterations were performed in the "A" reactor core quadrant; specifically, eleven fuel bundles were loaded and two control rods were withdrawn individually a total of six times, and during that time, the "A" source range monitor located in the "A" quadrant was inoperable in that its scram function was bypassed.

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

II. VIOLATIONS NOT ASSESSED A CIVIL PENALTY

A. Technical Specification 3.0.4 requires that Limiting Conditions for Operation be satisfied, without reliance on the provisions of the action requirements, when entering into an operational mode or other specified condition. Technical Specification 3.5.1.c requires that the High Pressure Coolant Injection (HPCI) system be operable when in Operational Condition 2 (Start-up) with the reactor steam dome pressure greater than or equal to 150 psig.

Contrary to the above, at 7:15 a.m. on February 21, 1984, with the reactor in Operational Condition 2, reactor steam dome pressure exceeded 150 psig while the HPCI system was inoperable.

This is a Severity Level IV Violation (Supplement I)

B. Technical Specification Limiting Condition for Operation (LCO) 3.3.7.11 and the Table and Notation referenced therein, require that two Main Condenser Offgas Treatment System Explosive Gas Monitoring System channels be operable during Main Condenser Offgas Treatment System operation. If less than two channels are operable, operation of the Main Condenser Offgas Treatment System may continue for up to 30 days provided grab samples are collected at least once every four hours.

Contrary to the above, from 2:00 p.m. November 3, 1983 to 12:20 p.m. November 5, 1983, both channels of the Main Condenser Offgas Treatment System Explosive Gas Monitoring System at Unit 1 were inoperable, grab samples were not collected during that time, and the offgas system continued in operation.

This is a Severity Level IV Violation (Supplement I)

C. Technical Specification LCO 3.8.1.1a requires two physically independent circuits between the offsite transmission network and the onsite class 1E distribution system. With one offsite circuit inoperable, the LCO action statement requires that the remaining AC sources be demonstrated operable by performing Surveillance Requirement 4.8.1.1.1.a within one hour, and Surveillance Requirement 4.8.1.1.2.a.4 for each diesel generator within four hours. Technical Specification 3.0.3 requires that when a LCO is not met, except as provided in the associated Action requirements, action shall be initiated within one hour to place the unit in an operational condition in which the specification does not apply by placing it in at least the start-up operational mode within the next six hours.

Contrary to the above, on October 19, 1983, the alternate supply breaker (1A203-09) to Engineered Safeguards Auxiliary Bus 1A203 for Unit 1 was inoperable from 9:30 a.m. to 4:30 p.m. and Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 were not performed to demonstrate that the remaining AC sources were operable. Additionally, when the Limiting Condition for Operation was not met, action was not initiated within one hour to place the unit in an operational condition in which the specification did not apply. The offsite circuit was restored prior to the time when the plant was required to be in the start-up operational mode.

This is a Severity Level IV Violation (Supplement I)

Pursuant to the provisions of 10 CFR 2.201, Pennsylvania Power & Light Company is hereby required to submit to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, 631 Park Avenue, King of Prussia, PA 19406, within 30 days of the date of this Notice, a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violations; (2) the reasons for the violations, if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which will be taken to avoid further violations; (5) the date when full compliance will be achieved. Considerations may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required under 10 CFR 2.201, Pennsylvania Power & Light Company may pay the civil penalty in the amount of $75,000 or may protest imposition of the civil penalty, in whole or in part, by a written answer. Should Pennsylvania Power & Light Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalty proposed above. Should Pennsylvania Power & Light 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 V(B) of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate statements or explanations by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Pennsylvania Power & Light Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedures for imposing a civil penalty.

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

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Allan

for Thomas E. Murley
Regional Administrator

Date at King of Prussia, Pennsylvania
this 6th day of July, 1984

PP&L Pennsylvania Power & Light Company
Two North Ninth Street • Allentown, PA 18101 • 215 / 770-5151

AUG 0 3 1984

Bruce D. Kenyon
Vice President-Nuclear Operations
215/770-7502

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

SUSQUEHANNA STEAM ELECTRIC STATION
RESPONSE TO ENFORCEMENT ACTION 84-5
ER 100450/100508 FILE 841-04
PLA-2250

Docket Nos. 50-387/NPF-14
and 50-388/NPF-22

Dear Mr. DeYoung:

Pursuant to 10CFR2.201, Pennsylvania Power & Light Company hereby provides the attached response to Enforcement Action 84-5. Payment in the amount of $75,000 is enclosed.

We trust the Commission will find our response acceptable.

Very truly yours,

B. D. Kenyon
Vice President-Nuclear Operations

Attachments
Affidavit

cc: Dr. Thomas E. Murley
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Mr. R. H. Jacobs - NRC Resident Inspector

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA)
: SS
COUNTY OF LEHIGH)

I, Bruce D. Kenyon, being duly sworn according to law, state that I am Vice President-Nuclear Operations of Pennsylvania Power & Light Company and that the facts set forth on the attached response to Enforcement Action 84-5 dated July 6, 1984, are true and correct to the best of my knowledge, information and belief.

Bruce D. Kenyon
Vice President-Nuclear Operations

Sworn to and subscribed
before me this 30th day
of August, 1984.

Notary Public

MARTHA C. BARTO, Notary Public
Allentown, Lehigh County, Pa.
My Commission Expires Jan. 13, 1986

RESPONSE TO ENFORCEMENT ACTION 84-5

In the forwarding letter for Enforcement Action 84-5, Dr. Murley raised two general concerns regarding the four violations as involving either ineffective response to indications and annunciators, or failure to recognize the applicability of technical specification requirements. In response to his concerns, the following information is provided.

PP&L has extensively investigated each of the incidents identified in Enforcement Action 84-5. Although the investigations indicated that these incidents were relatively unrelated, this collection of incidents caused us to question whether or not there were underlying deficiencies in our operations which had not been detected by these or previous reviews. Accordingly, in addition to the actions taken in response to each of the incidents, the following actions were taken as a means to more fundamentally assess the quality of our operations:

- Management personnel were assigned to perform on-shift observations and report findings to the Plant Superintendent. In particular, management questioned the operators regarding plant status, evolutions in progress, and any abnormal conditions.

- PP&L's Nuclear Safety Assessment Group conducted a five-day round-the-clock assessment of control room watchstanding practices. This assessment included particular attention to watch relief practices, responsiveness to alarms, and log keeping.

- At PP&L's request, INPO conducted a five-day special assistance visit to Susquehanna SES to observe control room operations. INPO also examined operator distractions, hindrances, and performance.

- PP&L retained a team of consultants to conduct a two-week review of control room work practices and environmental conditions to determine which of these, if any, detract from optimum operator performance.

The results of these investigations indicated that overall operator performance was good with no significant weaknesses.

One objective of the reviews was to identify factors which could detract from optimum operator performance. A number of items were identified which are being incorporated into an "Operations Enhancement Program." We believe that these actions, in the aggregate, should strengthen operator performance. Our responses to the four individual violations follow.

I.A. Violation Assessed a Civil Penalty (388/84-19-01):

Technical Specification 3.9.2 requires that whenever the reactor is in Operational Condition 5 (Refueling), at least two Source Range Monitor (SRM) channels shall be operable and inserted to the normal operating level, with one of the required SRM detectors located in the quadrant where core alterations are being performed and the other SRM detector located in an adjacent quadrant.

Contrary to the above, between 4:28 p.m. on April 10, 1984, and 1:45 a.m. on April 11, 1984, core alterations were performed in the "A" reactor core quadrant; specifically, eleven fuel bundles were loaded and two control rods were withdrawn individually a total of six times, and during that time, the "A" source range monitor located in the "A" quadrant was inoperable in that its scram function was bypassed.

Response:

1. PP&L admits that core alterations were performed in the "A" reactor core quadrant while the scram function was bypassed on the "A" source range monitor. (See Licensee Event Report, Unit 2, 84-002-00, dated May 10, 1984.)

2. Based on a thorough review of this event, it has been determined that personnel error was the only significant contributing factor to the violation.

   In evaluating this event, it is important to note that ample core protection was assured. Although the "A" source range monitor upscale scram had been bypassed, there were a total of seventeen (17) other non-coincident scram functions on line; three for the other source range monitors, eight for the intermediate range monitors, and six for the average power range monitor. Non-coincident scram functions had been established by removal of the shorting links required for channel coincidence.

   Administrative controls to preclude inadvertent criticality were also in place during this event.

   a. The neutron monitoring function of the "A" source range monitor was operable throughout the event. This indication was incorrectly assumed to indicate that the "A" source range monitor was fully operable.

   b. An average inverse count rate measurement plot was maintained throughout the event.

   c. The source range monitor/fuel loading chamber detector indication was monitored throughout the event.

d. The one-rod-out interlock with the reactor mode switch locked in the "refuel" position was operable and would have prevented the withdrawal of more than one control rod.

In addition, a partial core shutdown margin test had been performed after 144 bundles had been loaded. The test satisfactorily demonstrated that there was adequate shutdown margin for the partially loaded core.

3. The following steps were taken to correct the problem:

a. The shift supervisor, upon notification that the "A" source range monitor scram function was bypassed, immediately halted core alterations. The bypass was removed, Technical Specifications Section 3.9.2 was reviewed, and the status of the source range monitor/fuel loading chamber was verified for all core quadrants.

b. The average inverse count rate measurement plot was reviewed. It demonstrated that the core had not been near the predicted critical configuration.

4. The following corrective steps were taken to avoid further violations:

a. Management reiterated that no core alterations were to take place for the remainder of initial fuel load unless all four source range monitors were operable.

b. Management has taken appropriate actions in regard to personnel conduct.

c. Shift turnover practices have been revised to include several overlapping panel walkdowns. The on-coming Shift Supervision arrives early to begin turnover with the off-going Shift Supervision. The on-coming Shift Supervision then observes the operator turnovers which include panel walkdowns by the on-coming and off-going operators. As soon as practical following shift turnover, Shift Supervision conducts a second panel walkdown with the operators. In addition, the administrative procedure for shift routine has been revised to require the operators to record panel alarms and the reason for each alarm. The alarm status is revised during the shift as appropriate.

d. This event was incorporated into the licensed operators requalification training program. All shifts had training on this event.

5. PP&L is now in full compliance.

II.A. Violation Not Assessed a Civil Penalty (387/84-11---):

Technical Specification 3.0.4 requires that Limiting Conditions for Operation be satisfied, without reliance on the provisions of the action requirements, when entering into an operational mode or other specified condition. Technical Specification 3.5.1.c requires that the High Pressure Coolant Injection (HPCI) system be operable when in Operational Condition 2 (Start-up) with the reactor steam dome pressure greater than or equal to 150 psig.

Contrary to the above, at 7:15 a.m. on February 21, 1984, with the reactor in Operational Condition 2, reactor steam dome pressure exceeded 150 psig while the HPCI system was inoperable.

Response:

1. PP&L admits that the reactor steam dome pressure exceeded 150 psig while HPCI was inoperable. (See Licensee Event Report, Unit 1, 84-009-00 dated March 20, 1984.)

2. The violation was the result of uncertainty as to the proper interpretation of Technical Specifications.

   a) Technical Specifications Section 3.5.1 requires HPCI to be operable in Condition 1 and when reactor steam dome pressure exceeds 150 psig in Conditions 2 and 3. Technical Specifications Section 3.0.4 states "Entry into an OPERATIONAL CONDITION or other specified condition shall not be made unless the conditions for the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION requirements."

   b) The reactor remained in Condition 2 (Startup) throughout the event. However, the operators failed to recognize that, although no change in operational condition occurred, exceeding 150 psig did represent entry into a "specified condition".

   It should be noted that feedwater and low pressure coolant injection were available to cover the core throughout the event. Also, there was minimal decay heat since the unit had just started operation following an extended outage and had not exceeded 2% power at the time of the event.

3. The following steps were taken to correct the problem:

   a. The HPCI topaz inverter was energized.

   b. The HPCI steam supply valves and drain valves were properly repositioned.

   Following these corrective actions, HPCI was declared ready for operation and was subsequently tested satisfactorily.

4. The following corrective steps were taken to avoid further violations:

   a. The general operations plant start-up procedure has been revised to require a sign off that HPCI is operable prior to exceeding 150 psig steam dome pressure.

   b. The HPCI topaz inverter has been added to the system checkoff list, the HPCI operating procedure, and the Operator Instructions for operator rounds.

   c. This event was incorporated into the licensed operators requalification training program. All shifts had training on this event.

5. PP&L is now in full compliance.

II.B. Violation Not Assessed a Civil Penalty (387/83-24-01):

Technical Specification Limiting Condition for Operation (LCO) 3.3.7.11 and the Table and Notation referenced therein, require that two Main Condenser Offgas Treatment System Explosive Gas Monitoring System channels be operable during Main Condenser Offgas Treatment System operation. If less than two channels are operable, operation of the Main Condenser Offgas Treatment System may continue for up to 30 days provided grab samples are collected at least once every four hours.

Contrary to the above, from 2:00 p.m. November 3, 1983 to 12:20 p.m. November 5, 1983, both channels of the Main Condenser Offgas Treatment System Explosive Gas Monitoring System at Unit 1 were inoperable, grab samples were not collected during that time, and the offgas system continued in operation.

Response:

1. PP&L admits that the main condenser offgas treatment system was operated with both channels of the explosive gas monitoring system inoperable and grab samples were not collected as required. (See Licensee Event Report, Unit 1, 83-144/01T-0, dated November 18, 1983.)

2. The following factors contributed to the violation:

   a. The operating procedure for the hydrogen analyzers inadequately described the number of valves associated with the common recombiner system in that the individual supply and return valves were not identified. The operator assigned to line up the common recombiner system analyzers could only find two valves and, with shift supervision concurrence, incorrectly concluded that there were only two valves in the system. The fact that the two return valves were partially blocked from view by an instrument line protective tray was a contributing factor.

   b. The hydrogen analyzer annunciating alarms, located on a local panel, were not promptly investigated. A common control room panel alarm exists but was already annunciating due to other alarms at the local panel.

3. The following steps were taken to correct the problem:

   a. An investigation of the hydrogen analyzer alarms identified the two return valves as being in the closed position. The valves were opened placing both channels of the hydrogen analyzers in service.

   b. An analysis was performed utilizing the hydrogen recombiner's inlet and outlet temperatures for the period

during which the analyzers were inoperable. The analysis concluded that during the period the analyzers were inoperable, the hydrogen recombiners functioned properly and no abnormal concentrations of hydrogen existed.

4. The following corrective steps were taken to avoid further violations:

   a. The offgas system operating procedure has been revised to clarify that two supply valves and two return valves are required to be open to place the hydrogen analyzers in service for each recombiner.

   b. More visible means of identifying those valves obscured by other components have been installed by adding large easy-to-read tags and stenciling the structures in close proximity to the valves for all recombiners.

   c. The operating procedure for heatup has been revised to specifically identify placing the hydrogen analyzers in service per the offgas system operating procedure.

   d. The administrative procedure for shift routine has been revised to require the operators to record panel alarms and the reason for each alarm. The alarm status is revised during the shift as appropriate.

   e. Training on the event has been completed as follows:

      1) The event was reviewed by the Operations Supervisor at his weekly training session, with emphasis placed on making operators aware of all local control panel annunciators in accordance with the "operator rounds" procedure.

      2) The STA's conducted training sessions on the event with the unit supervisors, nuclear plant operators, auxiliary system operators, and plant control operators. The training emphasized communication between unit supervisors and nuclear plant operators, procedural clarification, and valve visibility.

      3) This event was incorporated into the licensed operators requalification training program. All shifts had training on this event.

5. PP&L is now in full compliance.

II.C. Violation Not Assessed a Civil Penalty (387/83-24-02):

Technical Specification LCO 3.8.1.1a requires two physically independent circuits between the offsite transmission network and the onsite class 1E distribution system. With one offsite circuit inoperable, the LCO action statement requires that the remaining AC sources be demonstrated operable by performing Surveillance Requirement 4.8.1.1.1.a within one hour, and Surveillance Requirement 4.8.1.1.2.a.4 for each diesel generator within four hours. Technical Specification 3.0.3 requires that when a LCO is not met, except as provided in the associated Action requirements, action shall be initiated within one hour to place the unit in an operational condition in which the specification does not apply by placing it in at least the start-up operational mode within the next six hours.

Contrary to the above, on October 19, 1983, the alternate supply breaker (1A203-09) to Engineered Safeguards Auxiliary Bus 1A203 for Unit 1 was inoperable from 9:30 a.m. to 4:30 p.m. and Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 were not performed to demonstrate that the remaining AC sources were operable. Additionally, when the Limiting Condition for Operation was not met, action was not initiated within one hour to place the unit in an operational condition in which the specification did not apply. The offsite circuit was restored prior to the time when the plant was required to be in the start-up operational mode.

Response:

1. PP&L admits that with the alternate supply breaker inoperable, required surveillances were not performed to demonstrate that the remaining AC power sources were operable. (See Licensee Event Report, Unit 1, 83-139/01X-1, dated November 21, 1983.)

2. The violation was the result of an incorrect determination that Technical Specifications Section 3.8.3.1 rather than Section 3.8.1.1a applied when the alternate supply breaker was removed from service for maintenance. Technical Specifications Section 3.8.3.1 specifies onsite power distribution lineups; however, Technical Specifications Section 3.8.1.1a requires two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system. Although both off-site power sources were available, maintenance on the alternate supply breaker resulted in both off-site sources relying on a single circuit breaker for connection to the on-site system. The fact that this did not meet the intent of the requirement for physical independence was not recognized. Since the proper LCO was not recognized, the operators were not aware that the action statement was violated.

3. The following steps were taken to correct the problem:

   a. Operating shift personnel identified this violation after the electrical system was returned to the normal lineup. Subsequent to their review of the completed work, they initiated an Event Report to inform Management of a potentially reportable event. Management then informed the NRC resident inspector and explained the incident in detail including the difficulty in understanding the intent of the Technical Specification.

   b. Once the correct interpretation of Technical Specifications Section 3.8.1.1.a had been recognized, the surveillances associated with the LCO were initiated. A breaker alignment and a quick start of the "C" Diesel Generator were performed with acceptable results.

4. The following steps were taken to avoid further violations:

   a. The event was reviewed by the Operations Supervisor at his weekly training session to ensure that the intent of Technical Specifications Section 3.8.1.1a was understood by all licensed operators. Also, shift supervision has been instructed on the proper interpretation of the Technical Specifications. A formal Notice of Interpretation has been issued.

   b. The preventative maintenance work authorization form has been revised to note that Technical Specifications Sections 3.8.1.1 and 3.8.3.1 are to be referenced when work is performed on Unit 1 or 2 4.16kV main or alternate feeder breakers.

   c. This event was incorporated into the licensed operators requalification training program. All shifts had training on this event.

5. PP&L is now in full compliance.

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

JUN 18 1984

Docket Nos. 50-277
50-278

EA 84-39

Philadelphia Electric Company
ATTN: Mr. V. Boyer
Senior Vice President - Nuclear
2301 Market Street
Philadelphia, Pennsylvania 19101

Gentlemen:

Subjects: 1. Order Modifying License Effective Immediately
2. Notice of Violation and Proposed Imposition of Civil Penalties

On April 12, 1984, an Enforcement Conference was held by Dr. Thomas E. Murley, Regional Administrator, Region I with you and members of your staff at the NRC Region I Office to review the circumstances associated with apparent violations of NRC requirements which occurred at the Peach Bottom Atomic Power Station, Units 2 and 3. Two of the violations were identified by the NRC during an NRC inspection conducted January 5-20, 1984. The report of this inspection was sent to you on February 29, 1984. (Reference: NRC Inspection Report Nos. 50-277/84-01; 50-278/84-01.) Three other violations, which were identified by members of your staff, were reviewed during an NRC inspection conducted on January 13 - February 29, 1984. The report of this inspection was forwarded to you on March 19, 1984. (Reference NRC Inspection Report Nos. 50-277/84-03; 50-278/84-03.) At the Enforcement Conference, the causes of these violations and your corrective actions were discussed.

The violations are described in the enclosures. The first violation, which is described in the enclosed Order Modifying License Effective Immediately, involved a change to a plant operating procedure for plant shutdown and a change to the shutdown sequence described in the FSAR, without having performed an adequate evaluation to ensure that the changes did not violate technical specifications or result in an unreviewed safety question. As a result of the changes, rods were scrammed individually during shutdowns of the reactor from 1977 to late 1983, effectively bypassing the safety functions of the Rod Worth Minimizer (RWM) and the Rod Sequence Control System (RSCS). These systems ensure adherence to approved control rod sequences and were required by the technical specifications to be operable at the time.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

In addition, as described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties, three other violations occurred which involved failures to adhere to facility technical specification limiting conditions for operation. The first violation involved two occurrences during startup of both Unit 2 and Unit 3 in which the reactor heatup rates exceeded the limits specified in the technical specifications. The first instance occurred because reactor operator license trainees working in the control room did not properly use recorded data to obtain heatup rates. In the second instance, the violation occurred because an operator was withdrawing control rods too quickly. In both instances, adequate supervision and oversight of startup activities was not provided.

In the second violation, an unplanned reactor pressurization, above atmospheric pressure, occurred with the reactor at 110°F. At that temperature, reactor pressurization is prohibited by the technical specifications. This violation was caused by a failure to provide sufficient detail in a procedure regarding checks of valve positioning, thereby resulting in failure to recognize that valves were not properly positioned.

In the third violation, although a control rod was inoperable, as indicated by a slow response time during a reactor scram on November 17, 1983, this condition was not recognized until the rod again exhibited a slow response time during another scram of the reactor on January 14, 1984. Although the scram response times were reviewed in November 1983 by a junior technical assistant, technical assistant, shift supervisor, and supervisory engineer, the slow response time of the particular control rod was not identified.

These violations demonstrate the need for improvements at Peach Bottom to assure that the plant is operated in accordance with the technical specifications. To emphasize the need for improvements in the process for reviewing changes to the plant and procedures, I am issuing the enclosed Order Modifying License Effective Immediately to require an appraisal of your review process and certain plant procedures. To emphasize the need for improved procedures, improved adherence to procedures, and improved supervisory performance and oversight of plant activities, I am issuing the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $30,000 for the violations described in Section I of the Notice. The violations described in Section I of the Notice involve the failure to adhere to technical specification limiting conditions for operation. Although if considered individually these violations are of low safety significance, collectively they reflect a significant problem with adherence to technical specifications and, accordingly, have been categorized in the aggregate as a Severity Level III problem. The base civil penalty amount for a Severity Level III violation or problem is $40,000. The civil penalty has been mitigated to $30,000 because of the unusually prompt and extensive corrective actions taken for violation I.C.

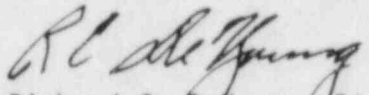
Section II of the enclosed Notice of Violation contains three examples of failures to follow procedures. The failures to follow procedures concern maintenance and surveillance activities involving the RWM and RSCS. These examples further illustrate the licensee's problems regarding the inoperability of systems. This violation is classified as Severity Level IV. A civil penalty is not proposed for this violation.

You are required to respond to the enclosed Order and Notice and you should follow the instructions specified therein when preparing your response. In your response, you should address the specific actions taken and planned to ensure adequate safety reviews, attention to detail in routine plant operations and testing, and improved supervisory performance and oversight of plant activities. Your response to this letter and Notice will be used in determining whether further enforcement action is warranted.

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

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

Sincerely,



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosures:
1. Order Modifying License Effective Immediately
2. Notice of Violation and Proposed Imposition of Civil Penalties

cc w/encls:
R. S. Fleischmann, Station Superintendent
Troy B. Conner, Jr., Esquire
Eugene J. Bradley, Esquire, Assistant General Counsel
Raymond L. Hovis, Esquire
Michael J. Scibinico, II, Assistant Attorney General
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
Commonwealth of Pennsylvania

Enclosure 1

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter	)	Docket Nos. 50-277; 50-278
	)	License Nos. DPR-44; DPR-56
PHILADELPHIA ELECTRIC COMPANY	)	EA 84-39
Peach Bottom Atomic Power Station,	)	
Units 2 and 3	)	

ORDER MODIFYING LICENSE EFFECTIVE IMMEDIATELY

I

Philadelphia Electric Company (the "licensee") is the holder of Facility Operating License Nos. DPR-44 and DPR-56, issued October 25, 1973 and July 2, 1974 respectively, which authorize the licensee to operate the Peach Bottom Atomic Power Station, Units 2 and 3 (the "facility") located in Delta, Pennsylvania.

II

In November 1983, the NRC became aware of the licensee's practice of individually scramming control rods to effect a normal reactor shutdown. The practice was further reviewed during an NRC inspection conducted January 5-20, 1984, and a violation of NRC requirements was identified. The violation involved changes to the facility and facility procedures allowing individual scramming of control rods without an adequate safety review, as required by 10 CFR 50.59, to determine if the changes involved a modification to technical specifications or an unreviewed safety question. Specifically, in 1977, plant operating procedure GP-3 used for normal plant shutdowns was changed, and in 1978, plant operating procedure GP-9 was written such that the safety functions of two systems required to be operable by facility technical specifications during plant shutdowns, namely the Rod Worth Minimizer (RWM) and the Rod Sequence Control System (RSCS), were effectively bypassed during plant

shutdowns. This operating mode was different than described in the Final Safety Analysis Report (FSAR) and inconsistent with technical specification operability requirements, and was implemented without prior NRC approval, without a change to the technical specification, and without a documented safety evaluation to indicate that the change did not involve an unreviewed safety question. This change was reviewed by the licensee's Plant Operations Review Committee (PORC), but the implications of the change apparently were not recognized by the PORC. Further, in 1979, a separate shutdown sequence was programmed into the RWM, that differed substantially from the startup sequence, without evaluating the change to determine if it involved an unreviewed safety question with respect to the FSAR. Consequently, from 1977 through 1983, the licensee failed to recognize that the method used in shutting down the reactors was contrary to the plant technical specifications and the FSAR.

The RWM and RSCS function to avoid control rod patterns that could result in unacceptable consequences in the event of a control rod drop accident. The licensee's practice of individually scramming control rods effectively bypassed the RWM and RSCS controls and reduced the margin of safety in the event of a rod drop accident.

III

This violation demonstrates the need for an assessment at the Peach Bottom Atomic Power Station to determine (1) whether adequate safety reviews have been and are currently being performed when plant and procedure changes are made; and (2) whether inconsistencies exist in other procedures with regard

to the FSAR and technical specification requirements, as a result of procedure changes not receiving adequate safety review. Since such inconsistencies, if any exist, could reduce the level of safety at the facility, I have determined that the actions set forth below are required for the public health, safety, and interest, and therefore, should be imposed by an immediately effective Order.

IV

In view of the foregoing, pursuant to Sections 103, 161(i), 161(o), and 182 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Part 2 and 10 CFR Part 50, IT IS HEREBY ORDERED EFFECTIVE IMMEDIATELY THAT:

Within 60 days of the effective date of this Order, the licensee shall submit to the Regional Administrator, Region I, for review and approval, a plan for an appraisal of: (1) the licensee's process for performing safety evaluations and reviews of procedures pursuant to 10 CFR 50.59 to determine if the process is currently effective, or if improvements are needed; (2) plant and system operating procedures to verify that existing procedures are consistent with technical specifications, technical specification bases, and those sections of the FSAR concerning systems necessary to mitigate Design Basis Accidents, and do not involve unreviewed safety questions; and (3) the licensee's program for ensuring that employees involved in the review and approval of operating procedures remain cognizant of the licensing bases.

The NRC expects that this appraisal will involve a process of screening numerous facility procedures to identify those warranting a detailed review. The appraisal shall be conducted, coordinated, and reviewed, by individuals who are familiar with the application of the Boiling Water Reactor technical specifications. In addition, the appraisal shall be performed in a manner that shall not detract from safe plant operation.

The appraisal plan shall describe:

(1) the qualifications of the appraisal team members, and a discussion of their degree of independence, regarding areas reviewed;

(2) the methods of performing the appraisal and documenting the results;

(3) the schedule for completion of appropriate milestones; and

(4) the methods for resolving appraisal findings in a timely manner.

Upon approval of the appraisal plan by the Regional Administrator, Region I, the appraisal plan shall be implemented. Scheduled milestone completion dates may not be extended without good cause and the concurrence of the Regional Administrator, Region I.

The licensee shall direct the appraisal team to submit to the Regional Administrator, Region I, at the time it is submitted to the licensee management, a copy of any report of the appraisal and recommendations resulting from the appraisal. The licensee shall direct the appraisal team to report immediately, upon identification, to the licensee management and the NRC any inconsistencies which could affect the safe operation of the facilities. In addition, the licensee shall consider the recommendations resulting from the appraisal and provide to the Regional Administrator, Region I, an analysis of each such recommendation and the action to be taken in response to the recommendation. The licensee shall also provide a schedule for accomplishing these actions.

The Regional Administrator, Region I, may relax or terminate in writing any of the preceding requirements for good cause.

V

The licensee may request a hearing on this Order. A request for hearing shall be submitted to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 within 30 days of the date of this Order. A copy of the request shall also be sent to the Executive Legal Director at the same address and to the Regional Administrator, Region I, 631 Park Avenue, King of Prussia, PA 19406. ANY REQUEST FOR A HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

If a hearing is to be held concerning this Order, the Commission will issue an Order designating the time and place of hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Order shall be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 18th day of June 1984

Enclosure 2

NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

Philadelphia Electric Company
Peach Bottom Atomic Power Station
Units 2 and 3

Docket Nos. 50-277; 50-278
License Nos. DPR-44; DPR-56
EA 84-39

During a routine NRC inspection on January 13 - February 29, 1984, the NRC reviewed the circumstances associated with violations of technical specification limiting conditions for operation which were identified by the licensee and reported to the NRC. These violations involved two examples of excessive reactor vessel heatup rates, reactor pressurization at a temperature at which pressurization is prohibited, and startup and operation of the reactor with an inoperable control rod in that the rod exhibited a slow scram response time.

The occurrence of excessive heatup rates at each unit, plus an inadvertent reactor pressurization, demonstrate a lack of attention to detail and inadequate supervisory performance and control of plant activities. The excessive heatup rates occurred in the one instance because trainees did not properly utilize recorded data and supervision did not recognize this failure. In the other instance, an operator was withdrawing control rods too quickly. The unplanned pressurization of the reactor occurred because valves were not properly positioned, and the improper positions were not recognized during valve checks. The failure to recognize a slow control rod scram time in November 1983 followed by startup and operation of the reactor until January 1984 with this rod fully withdrawn, is of serious concern because several individuals reviewed the scram response times after the November shutdown, but the slow response time of the one rod was not recognized. As a result, adequate shutdown margin was not assured. Although the individual safety significance of these events was minimal, collectively, these events involved both facilities, various shifts and some experienced operators, and they demonstrate (1) inadequate attention to detail during the performance of plant operations; (2) inadequate control and supervision of routine plant operations and tests; (3) inadequate procedures; and (4) failure to adhere to procedures.

To emphasize the importance of providing (1) adequate attention to detail during the performance of plant activities, (2) adequate procedures, and (3) adequate supervision of plant activities to ensure procedures are followed and parameters are maintained within Technical Specification limits, the Nuclear Regulatory Commission proposes civil penalties in the cumulative amount of $30,000. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295 and 10 CFR 2.205, the particular violations and the associated civil penalties are set forth below.

I. VIOLATIONS ASSESSED A CIVIL PENALTY

A. Technical Specification 3.6.A.1 requires that the average rate of change of reactor coolant temperature not exceed 100°F in any one-hour period during normal heatup or cooldown.

Contrary to the above,

1. During the heatup of Unit 3 on January 24, 1984 between 9:15 a.m. and 10:15 a.m. and between 9:30 a.m. and 10:30 a.m., the average rate of change (average over an hour) of the reactor coolant temperature, as indicated on the B recirculation loop temperature recorder, exceeded 100°F per hour. The actual temperature changes over the respective one hour periods were 102°F and 111°F.

2. During heatup of the Unit 2 reactor, on January 31, 1984, between 4:20 a.m. and 5:20 a.m., the reactor coolant temperature, as indicated by the A and B Recirculation Loop temperature traces, increased 110°F.

B. Technical Specification 3.6.A.2, Thermal and Pressurization Limits, and Figure 3.6.2, prohibit reactor vessel pressurization above atmospheric pressure at vessel temperatures below 120°F.

Contrary to the above, for approximately five minutes at about 5:30 p.m. on January 25, 1984, the Unit 3 reactor vessel was pressurized above atmospheric pressure to about 10 psig, and at the time, the reactor vessel temperature was below 120°F (about 110°F).

C. Technical Specification 3.3.C.3 specifies that the maximum scram time for 90 percent insertion of any operable control rod shall not exceed 7.0 seconds. Technical Specification 3.3.A.2.C specifies that control rods with scram times greater than those specified in Technical Specification 3.3.C.3 shall be considered inoperable.

Contrary to the above, on November 17, 1983, control rod 34-27 had a scram time of greater than 12 seconds, as indicated on a strip chart recorder, but this condition was not recognized at that time and the control rod was not considered inoperable until a subsequent reactor scram on January 14, 1984.

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

(Civil Penalty - $30,000 distributed equally among the violations).

II. VIOLATION NOT ASSESSED A CIVIL PENALTY

Technical Specification 6.8 and Regulatory Guide 1.33 (November 1972) require implementation of written procedures for troubleshooting, for control of maintenance, and for surveillance tests.

Contrary to the above, written procedures, as required above, were not adequately implemented as evidenced by the following examples:

a. Administrative Procedure A-26, Revision 23, dated June 24, 1983, Procedure for Corrective Maintenance, requires immediate investigation of plant problems and initiation of a Maintenance Request Form (MRF) for problems that cannot be corrected within eight hours.

However, problems with testing and operating the RWM and RSCS during a plant shutdown on November 17, 1983, were not sufficiently investigated to correct the problem within eight hours, and no MRF was initiated.

b. Administrative Procedure A-47, Revision 2, dated April 14, 1980, Procedure for the Generation of Surveillance Tests, requires that surveillance test procedure steps which document completion of Technical Specification related surveillance requirements to be indicated with an asterisk. The test results section shall be signed only if all asterisked steps are completed satisfactorily.

Technical Specification Surveillance Requirement 4.3.B.3a states that the group notch mode of RSCS shall be demonstrated to be operable by attempting to move a control rod more than one notch in the first program group after reaching 50 percent rod density on a reactor startup.

However, ST10.6, Revision 10, dated July 18, 1980, Rod Sequence Control System (RSCS) Function Test, was written and implemented without making the technical specification requirement an asterisked step. As a result, completed tests do not contain documentation of the completed technical specification surveillance requirement, and they were signed off as satisfactory.

C. Surveillance Test Procedure ST10.5, Revision 11, dated July 18, 1980, RWM Operability Check, requires, in an asterisked step, selection and listing of at least three rods to verify operability of the RWM rod select error function.

However, on May 28, 1983, ST10.5 was completed and signed off as satisfactory when only one rod was listed as having been used to verify the operability of the rod select error function.

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

Pursuant to the provisions of 10 CFR 2.201, Philadelphia Electric Company is hereby required to submit to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, 631 Park Avenue, King of Prussia, PA 19406, within 30 days of the date of this Notice, a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which will be taken to avoid further violations; (5) the date when full compliance will be achieved. Considerations may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required under 10 CFR 2.201, Philadelphia Electric Company may pay the civil penalties in the amount of $30,000 or may protest imposition of the civil penalties, in whole or in part, by a written answer. Should Philadelphia Electric Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties proposed above. Should Philadelphia Electric Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer may: (1) deny the violations listed in this Notice in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in 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 by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Philadelphia Electric Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedures for imposing civil penalties.

Upon failure to pay any civil 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

Date at Bethesda, Maryland
this 14th day of June 1984

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4502

JOHN S. KEMPER
VICE-PRESIDENT
ENGINEERING AND RESEARCH

July 18, 1984

Docket Nos. 50-277
50-278

EA No. 84-39

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

Dear Mr. DeYoung:

By letter dated June 18, 1984, R. C. Young, NRC, to V. S. Boyer, PECo, Philadelphia Electric Company received a Notice of Violation and Proposed Imposition of Civil Penalties EA No. 84-39.

Philadelphia Electric Company agrees with the description of the events contained in your letter and the notice and your indication that the events cited in each of the Violations Assessed a Civil Penalty was identified and properly reported to the NRC by the Company. Philadelphia Electric Company appreciates your recognition of the prompt corrective actions taken by our staff and your mitigation of the Civil Penalty.

A restatement of the violations follows below along with our responses.

II. Violations Not Assessed a Civil Penalty

Restatement of Violations II.A, II.B and II.C

"Technical Specification 6.8 and Regulatory Guide 1.33 (November 1972) require implementation of written procedures for troubleshooting, for control of maintenance and for surveillance tests.

Contrary to the above, written procedures, as required above, were not adequately implemented as evidenced by the following examples:

A. Administrative Procedure A-26, Revision 23, dated June 24, 1983, Procedure for Corrective Maintenance, requires immediate investigation of plant problems and initiation of a Maintenance Request Form (MRF) for problems that cannot be corrected within eight hours.

However, problems with testing and operating the RWM and RSCS during a plant shutdown on November 17, 1983, were not sufficiently investigated to correct the problem within eight hours, and no MRF was initiated.

B. Administrative Procedure A-47, Revision 2, dated April 14, 1980, Procedure for the Generation of Surveillance Tests, requires that surveillance test procedure steps which document completion of Technical Specification related surveillance requirements to be indicated with an asterisk. The test results section shall be signed only if all asterisked steps are completed satisfactorily.

Technical Specification Surveillance Requirement 4.3.B.3a states that a group notch mode of RSCS shall be demonstrated to be operable by attempting to move a control rod more than one notch in the first program group after reaching 50 percent rod density on a reactor startup.

However, ST 10.6, Revision 10, dated July 18, 1980, Rod Sequence Control System (RSCS) Function Test, was written and implemented without making the Technical Specification requirement an asterisked step. As a result, completed tests do not contain documentation of the completed Technical Specification surveillance requirement, and they were signed-off as satisfactory.

C. Surveillance Test Procedure ST 10.5, Revision 11, dated July 18, 1980, RWM Operability Check, requires, in an asterisked step, selection and listing of at

least three rods to verify operability of the RWM rod select error function.

However, on May 28, 1983, ST 10.5 was completed and signed-off as satisfactory when only one rod was listed as having been used to verify the operability of the rod select error function.

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

Response to Violation II.A

The Rod Worth Minimizer (RWM) and Rod Sequence Control System (RSCS) surveillance tests were not satisfactorily completed on November 17, 1983. As authorized by the Technical Specifications, a second licensed operator was assigned to fill the function of the Rod Worth Minimizer. The Rod Sequence Control System surveillance test deficiency was being investigated when the main turbine experienced high vibration and efforts were directed to accelerate the plant shutdown. The plant scrammed shortly thereafter, so the Rod Sequence Control System test could not have been completed even if the problem had been identified. Since both tests could not be completed, the documents were not retained, and because the attention of the control room personnel was focused on the plant shutdown and scram, the Maintenance Request Forms were not initiated.

Both the Rod Worth Minimizer and the Rod Sequence Control system functional tests were performed satisfactorily and no discrepanices were identified prior to reactor startup on November 21, 1983.

On April 10, 1984, a letter was distributed to all Senior Engineers requesting them to remind their personnel that once a surveillance test is begun, the document must be maintained and must eventually be filed in the station files. This letter also reminds personnel that problems which cannot be corrected within 8 hours through the use of plant procedures require the initiation of a Maintenance Request Form.

Response to Violation II.B

This violation was caused by a typographical error.

ST 10.6 - Rod Sequence Control System (RSCS) Functional Test, Revision 8, dated August 11, 1977, was revised on October 13, 1978 to add steps for procedure clarification. When the revision was submitted for typing, the step which demonstrated the operability of the Group Notch mode of RSCS after reaching 50 percent rod density on a reactor startup was indicated with an asterisk. During the typing, however, the asterisk was mistakenly deleted from the procedure step. The step was typed next to the bottom of the page and when the procedure was copied, the sign-off blank was not reproduced on the copy.

Although the step was not identified by an asterisk, the surveillance test requires documentation of additional actions required if other portions of the test do not function properly or if other discrepancies were noted during the performance of the test. If the step failed to produce the expected results, this requirement would identify and document the discrepancy.

ST 10.6 - Rod Sequence Control System (RSCS) Functional Test was revised and retyped on April 10, 1984, to correct the typographical errors identified in this inspection.

In addition, the clerical staff responsible for retyping revised or newly drafted procedures have been given guidance on areas to review when a procedure is typed. The clerical staff has also been instructed to obtain a second proof by the individual who submitted the document for revision prior to distribution of the document.

Response to Violation II.C

This violation was caused by errors incurred during the review of ST 10.5 after its completion. Individuals performing the test review failed to note that two control rods were not documented on the surveillance test. The operator performing the test selected three control rods to verify operability of the Rod Worth Minimizer rod select error function, but neglected to record two of three rods he selected on the procedure.

The operator who performed the test has been counseled on the importance of fully completing surveillance tests. The individuals who performed the review for this surveillance test have since left Philadelphia Electric Company for reasons unrelated to this error.

In addition, ST 10.5, RWM Operability Check, was revised on November 8, 1983, to make the need for data entry on the surveillance test more obvious to the individual performing the test, and more obvious to the individual reviewing the completed document.

I. Violations Assessed a Civil Penalty

Restatement of Violation I.A

"Technical Specification 3.6.A.1 requires that the average rate of change of reactor coolant temperature not exceed 100 degrees F in any one-hour period during normal heatup or cooldown.

Contrary to the above:

1. During the heatup of Unit 3 on January 24, 1984, between 9:15 a.m. and 10:15 a.m. and between 9:30 a.m. and 10:30 a.m., the average rate of change (average over an hour) of the reactor coolant temperature, as indicated on the B recirculation loop temperature recorder, exceeded 100 degrees F per hour. The actual temperature changes over the respective one-hour periods were 102 degrees F and 111 degrees F.

2. During heatup of the Unit 2 reactor, on January 31, 1984, between 4:20 a.m. and 5:20 a.m., the reactor coolant temperature, as indicated by the A and B Recirculation Loop temperature traces, increased 110 degrees F.

Violation I.A. has been categorized with Violation I.B and Violation I.C as a Severity Level III problem (Supplement I).

(Civil Penalty - $30,000 distributed equally among the violations)."

Response to Violation I.A

This violation was caused by personnel error.

During the startup of the Unit 3 reactor on January 24, 1984, operator trainees under the supervision of Reactor Operator were recording and calculating the reactor coolant temperature changes in accordance with ST 9.12 (Reactor Vessel Temperatures). The Reactor Operator's review of the Surveillance Test data identified the calculation errors.

The immediate action taken by the Reactor Operator was to reduce the heatup rate.

The Reactor Operator, the Utility Reactor Operator involved with the startup, and the Shift Supervisor each received disciplinary action for their lack of attention to detail.

During startup of the Unit 2 reactor on January 31, 1984, a reactor operator, while performing ST 9.12 (Reactor Vessel Temperatures), noted that the heatup rate was exceeding the Technical Specification limit. In responding to this event, the operator failed to take adequate corrective action rapidly enough to prevent reactor coolant temperature from rising by more than 100 degrees Fahrenheit within a one-hour period.

The Reactor Operator, the Utility Reactor Operator involved in the startup, and the Shift Supervisor have each received disciplinary action for their lack of attention to detail.

A letter from the Station Superintendent to all Licensed Operators was distributed on April 10, 1984 to discuss the heatup rate Technical Specification violations, clarify operator responsibilities, and to further express management's commitment to procedure compliance. This letter was attached to the April 10, 1984 shift meeting notes and reviewed during shift meetings to ensure that all operations personnel were aware of its contents.

Restatement of Violation I.B

"Technical Specification 3.6.A.2, Thermal and Pressurization Limits, and Figure 3.6.2, prohibit reactor

vessel pressurization above atmospheric pressure at vessel temperatures below 120 degrees F.

Contrary to the above, for approximately five minutes at about 5:30 p.m. on January 25, 1984, the Unit 3 reactor vessel was pressurized above atmospheric pressure to about 10 psig, and at the time, the reactor vessel temperature was below 120 degrees F. (about 110 degrees F).

Violation I.B. has been categorized with Violation I.A. and Violation I.C. as a Severity Level III problem (Supplement I).

(Civil Penalty - $30,000 distributed equally among the violations)."

Response to Violation I.B

The event was caused by personnel error. (Failure to follow procedures)

On January 25, 1984, Peach Bottom Atomic Power Station Unit 3 was in a cold shutdown condition. Upon completing maintenance on the reactor feed pump bypass valve, the permits were cleared and the system was set up for long path recirculation (feedwater system flush to the condenser). In setting up the feedwater system for long path recirculation, the operator failed to close the feedwater inlet valves to the reactor vessel as required in system procedure S.7.1.D. With a condensate pump in service, the operator opened the 5th heater outlet valve with the feedwater inlet valves open to the reactor vessel, thereby injecting condensate into the reactor vessel. Reactor vessel level increased approximately six feet and a minimal pressure increase was noted in the wide range reactor pressure strip chart recorder (PR-3-06-96). This pressure increase was estimated to be less than 10 psi, since the pen movement was much less than half of a 20 psig increment on the chart (0-1500 psi).

As a corrective measure, the responsible operator received specific counseling on the importance of following procedures.

In addition, this event was discussed in detail during shift meeting.

As a further corrective action, the station superintendent directed the operations engineer to emphasize to the operators at shift meetings of the importance of following the approved written procedures of the plant, and that operators are required to know and use those procedures applicable to their day-to-day work.

Restatement of Violation I.C

"Technical Specification 3.3.C.3 specifies that the maximum scram time for 90 percent insertion of any operable control rod shall not exceed 7.0 seconds. Technical Specification 3.3.A.2.C specifies that control rods with scram times greater than those specified in Technical Specification 3.3.C.3 shall be considered inoperable.

Contrary to the above, on November 17, 1983, control rod 34-27 had a scram time of greater than 12 seconds, as indicated on a strip chart recorder, but this condition was not recognized at that time and the control rod was not considered inoperable until a subsquent reactor scram on January 14, 1984.

Violation I.C. has been categorized with Violation I.A. and Violation I.B as a Severity Level II problem (Supplement I).

(Civil Penalty - $30,000 distributed equally among the violations)."

Response to Violation I.C

The event was caused by a failure of personnel to recognize and interpret the information displayed on the scram insertion time recorders as required by procedure ST 10.9, specifically Surveillance Requirement 4.3.C.2.

The corrective action taken was to modify the procedure for scram time testing by including samples of timing traces of control rods that fail to scram, control rods that scram from various positions, and control rods with acceptable scrams to the procedure.

In addition, the operators have been instructed to use a computer program to monitor all control rod positions following a controlled manual scram.

Conclusion

We believe that Philadelphia Electric Company has acted responsibly and expeditiously in reporting events, investigating and analyzing the cause of each event, performing corrective actions and, where possible, implementing measures to prevent recurrence. Philadelphia Electric Company recognizes your reduction of the base civil penalty as an acknowledgement of our responsiveness. Although we believe the imposition of a civil penalty is not the proper vehicle for promoting improved performance, we hereby enclose a check in the amount of $30,000 as payment of the imposed civil penalties.

In addition to discussing each of the aforementioned violations, your letter of June 18, 1984, included an Order Modifying License, Effective Immediately. At the present, our management has reviewed your Order Modifying License and is preparing a plan in conformance with the order. In accordance with the instructions in your order, the Region I Administrator should anticipate receipt of our plan for his appraisal by August 17, 1984.

If we can provide further information, please contact us.

Very truly yours,

Attachment

cc: Dr. T. E. Murley, Administrator
Mr. A. R. Blough, Site Inspector

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

Tennessee Valley Authority
ATTN: Mr. H. G. Parris
Manager of Power and Engineering
500A Chestnut Street Tower II
Chattanooga, TN 37401

Gentlemen:

SUBJECT: PROPOSED IMPOSITION OF CIVIL PENALTIES: EA-84-25
FAILURE TO IDENTIFY AND CORRECT CONDITIONS ADVERSE TO QUALITY, TO SUBMIT REQUIRED REPORTS, AND ADHERE TO THE REQUIREMENTS OF THE TECHNICAL SPECIFICATIONS
(REFERENCE INSPECTION REPORTS NOS. 50-259, 50-260, 50-296/83-46; 50-259, 50-260, 50-296/83-55; AND, 50-259, 50-260 50-296/84-01)

A routine safety inspection and two special safety inspections were conducted by this office between October 13, 1983 and January 6, 1984, of activities authorized by NRC Operating License Nos. DPR-33, 52, and 68 for the Browns Ferry facility. The inspections included a review of circumstances surrounding modification of the Scram Discharge Instrument Volume level instrumentation that resulted in a Limiting Condition for Operation being exceeded. Also during the course of the inspection was discovered that certain safety-related heat exchangers had been operated at greater than the design-rated pressure for a significant period of time. An Enforcement Conference held in the Region II office on December 16, 1983 to discuss these matters was attended by Mr. R. C. Lewis, Director, Division of Reactor Projects, Region II, and Mr. H. L. Abercrombie, Assistant to the Manager, Nuclear Power, TVA and members of their staffs.

The inspections disclosed three violations. The first violation encompasses several failures to promptly identify and correct conditions adverse to quality. The second violation involves failure to make required reports of these conditions to the NRC. The third violation involves the failure to perform a functional surveillance test as required by the plant technical specifications. We view these violations as being indicative of a programmatic weakness in the identification and correction of conditions adverse to quality.

To emphasize the seriousness of these violations, 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 Penalties in the amount of One Hundred Twenty Thousand Dollars ($120,000), which includes civil penalties of Forty Thousand Dollars ($40,000) for each of three violations described in the enclosed Notice. Each violation has been categorized as Severity Level III in accordance with the NRC General Statement of Policy and Procedure for Enforcement Action, 10 CFR Part 2, Appendix C.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

These events are attributed to insufficient management oversight and have been the subject of several senior level management meetings. As a result, the licensee has devoted a significant amount of attention to the development of the Browns Ferry "Regulatory Performance Improvement Plan." The licensee's commitments with regard to this program are being confirmed by Order. The implementation of this program will be examined during future inspections.

You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. Your response should specifically address the corrective actions taken or planned with regard to the violations as described in the Notice of Violation.

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

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

Sincerely,

Robert D. Martin for

James P. O'Reilly
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalties

cc w/encl:
J. A. Coffey, Director of Nuclear Power
G. T. Jones, Plant Superintendent
J. W. Anderson, Manager
Office of Quality Assurance
H. N. Culver, Chief, Nuclear Safety
Review Staff
D. L. Williams, Jr., Supervisor
Licensing Section
R. E. Rogers, Project Engineer

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Tennessee Valley Authority
Browns Ferry 1, 2, and 3

Docket Nos. 50-259, 50-260, and 50-296
License Nos. DPR-33, DPR-52, and DPR-68
EA 84-25

As a result of inspections conducted between October 13, 1983 and January 6, 1984, in accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR 2, Appendix C, three violations were identified.

The first violation involves four examples of licensee failure to ensure that conditions adverse to quality were promptly identified and corrected. The inadequacies presented in these examples represent a variety of instances where TVA management failed to take effective action, although adequate information was available to permit this action. A summary of these examples is given below:

1. The inoperability of a scram discharge instrument volume (SDIV) level transmitter (2-LT-85-45A) in Unit 2 could have been identified using the post-trip computer printouts on four occasions, if the appropriate post-trip reviews had been conducted in accordance with plant operating instructions.

2. Control measures were inadequate to ensure that the level transmitter 2-LT-85-45A response time was adequate for operability of the instrument. As a consequence of this, the post-modification testing and monthly surveillance failed to detect that the instrument response time exceeded the limit specified in the safety evaluation.

3. The Plant Operations Review Committee did not properly review evaluations addressing previously unreviewed safety questions affecting the operability of equipment at Browns Ferry Station. Specifically, the appropriate station personnel were not notified of a change to the required response time for the SDIV instrumentation, or several other revisions to the original SDIV modification.

4. Corrective actions were not promptly taken upon identification of component design incompatibilities. Specifically, neither prompt corrective actions nor compensatory actions were taken to correct the known design deficiencies of the diesel generator heat exchangers or the residual heat removal (RHR) pump seal cooler heat exchangers.

Although the uncertainty of operability of the emergency diesel generators and the RHR pumps could each be categorized as separate Severity Level III violations, we have decided not to address these as separate violations. The examples have been combined into a single violation demonstrating a programmatic weakness requiring comprehensive evaluation and corrective action. This violation has been categorized as a Severity Level III violation with a $40,000 proposed civil penalty.

The second violation involves two occasions where required reports were not made to the NRC. To emphasize the importance of reporting as a fundamental concern, NRC enforcement policy provides that a reporting violation may be categorized at a severity level commensurate with the severity level of the event. Accordingly, the reporting violation has likewise been categorized as a Severity Level III violation with a proposed civil penalty of $40,000.

The third violation involves the failure of the licensee to immediately functionally test the RPS channels monitoring the level in the SDIV once it was determined that level transmitter 2-LT-85-45A had failed in an unsafe condition.

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

I. A. 10 CFR 50, Appendix B, Criterion XVI, as implemented by TVA Topical Report, Section 17.2.16, requires the licensee to establish measures to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances, are promptly identified and corrected.

Contrary to the above, from March 18, 1983 through October 13, 1983, one of the Unit 2 west scram discharge instrument volume scram level switches (2-LT-85-45A) was inoperable making the number of operable instrument channels less than two. The licensee had information available from scrams occurring on May 30, September 16, September 18 and October 7, 1983 which indicated that level transmitter 2-LT-8545A was inoperable yet did not correct the problem.

B. 10 CFR 50, Appendix B, Criterion III, requires that design control measures shall provide for verifying or checking the adequacy of design, such as by the performance of design reviews, by the use of alternate or simplified calculational methods, or by the performance of a suitable testing program. Design control measures shall be applied to the delineation of acceptance criteria for test.

Contrary to the above, the requirement was not met in that the post-modification testing (PTM-100) conducted to assure design adequacy on the newly installed differential pressure high level switches (Rosemount 1153DP) (2-LT-85-45A) on the Unit 2 scram discharge instrument volumes, did not include instrument response timing requirements. A subsequent response timing test on 2-LT-85-45A, conducted on October 14, 1983, revealed an instrument response time of 17.5 minutes. This response time exceeded the currently accepted safety evaluation criteria. Additionally, the monthly surveillance (SI4.1.A-8) for the scram discharge instrument volume high level instruments did not include specific time response requirements.

C. Technical Specification 6.2.B.4.c, as implemented by Browns Ferry Standard Practices 8.3 and 17.8, requires the Plant Operations Review Committee (PORC) to review proposed changes to systems having safety significance which may constitute an unreviewed safety question.

Contrary to the above, the PORC failed to identify the special time response requirement in Revision 8 of Unreviewed Safety Question Determination for Engineering Change Notice (ECN) 0392, dated December 17, 1982, concerning the installation of the scram discharge volume and associated instrumentation. As a result, neither the plant personnel nor the plant manager were aware that the trip signal initiation response for the scram discharge volume high level exceeded the special timing requirement imposed by the engineering design group in ECN 0392, and the original time response for the level instrumentation.

D. 10 CFR 50, Appendix B, Criterion III requires that measures shall be established for the identification and control of design interfaces and for coordination among participating design organizations; that design control measures shall provide for verifying or checking the adequacy of design; and that design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design."

(1) Contrary to the above, this requirement was not met in that the Emergency Equipment Cooling Water (EECW) diesel generator heat exchangers were operated, since the original installation, at pressures ranging from 100 to 135 psig with the design pressure of the heat exchangers being 75 psig.

(2) Contrary to the above, engineering procedure EN DES-EP 1.48 issued December 16, 1983 allowed decisions to be made for a significant nonconforming condition without design control measures commensurate with those applied to the original design. In consequence, sixteen emergency diesel generator cooling water heat exchangers and twelve RHR pump seal cooling heat exchangers were not targeted for prompt corrective action applying the guidance from EN DES-EP 1.48.

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

II. A. Technical Specification 6.7.2.A.9 required that a prompt (within 24 hours) notification be made upon discovery during plant life of conditions not specifically considered in the Safety Analysis Report or Technical Specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

(1) Contrary to the above, this requirement was not met in that known deficiencies existed with the scram discharge instrument volume pressure transmitters (Rosemount 1153DP) on Unit 2 and these deficiencies were not promptly reported. The response time of level switch 2-LT-85-45A exceeded current safety evaluation criteria. The response time was known by plant personnel to be variable from 15-29 minutes while the accepted maximum response time was approximately 71 seconds. TVA's design organization redesigned the level detector system after determining that the level transmitter response times were "excessive" (Memorandum dated 12/23/82 concerning ECN P03920). This redesign effort was not reported and an evaluation establishing new response time criteria was not conducted until October 14, 1983. During this period the instrument failed to trip in response to high level in the scram discharge instrument volume following four scrams.

(2) Contrary to the above, this requirement was not met in that in March 1983, it was discovered that the diesel generator cooling water heat exchangers were being operated at pressures in excess of the rated pressure and a report acknowledging the Design Deficiency was not submitted to NRC until November 25, 1983 in Licensee Event Report 50-296/83-26, Revision 4.

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

III. A. Technical Specification 4.1.C requires upon determining that a reactor protection system (RPS) channel is failed in an unsafe condition, that the other RPS channel monitoring the same variable be functionally tested immediately before the trip system containing the failure is tripped.

Contrary to the above, on October 13, 1983, when it was determined that 2-LT-85-45A, an "A" RPS level transmitter for the SDIV, failed in the unsafe condition, the required channel functional test for RPS channel "B" was not performed. The functional test was not performed until the NRC resident inspector notified the licensee of the requirement in the plant technical specifications.

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

Pursuant to 10 CFR 2.201, Tennessee Valley Authority is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, with a copy to this office, within 30 days of the date of this Notice a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violations; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, the response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Tennessee Valley Authority may pay the civil penalties in the amount of $120,000 for the violations, or may protest imposition of the civil penalty in whole or in part by a written answer. Should Tennessee Valley Authority 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 Tennessee Valley Authority elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, such answer may: (1) deny the violations listed in this Notice in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty. In requesting mitigation of the proposed penalty, the five factors addressed in Section V(B) of 10 CFR Part 2, Appendix C, as revised, should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of Tennessee Valley Authority is directed to the other provisions of 10 CFR 2.205 regarding the procedure for imposing a civil penalty.

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

FOR THE NUCLEAR REGULATORY COMMISSION

SIGNED BY
ROBERT MARTIN /for

James P. O'Reilly
Regional Administrator

Dated in Atlanta, Georgia
this 20 day of July 1984

TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

August 20, 1984

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

Dear Mr. DeYoung

Enclosed is our response to J. P. O'Reilly's July 20, 1984 letter to H. G. Parris transmitting Proposed Civil Penalty Action: EA 84-25, Failure to Identify and Correct Conditions Adverse to Quality, to Submit Required Reports, and Adhere to the Requirements of the Technical Specifications (Reference Inspection Reports 50-259/83-46, -260/83-46, -296/83-46, 50-259/83-55, -260/83-55, -296/83-55, 50-259/84-01, -260/84-01, and -296/84-01) for our Browns Ferry Nuclear Plant which appeared to deviate from NRC commitments. We have enclosed our response to the Notice of Violation and Proposed Imposition of Civil Penalty. Fees in the response to the civil penalty of $120,000 are being wired to the NRC, Attention: Office of Inspection and Enforcement.

If you have any questions, please call me at FTS 858-2725.

To the best of my knowledge, I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

James A. Domer

James A. Domer
Nuclear Engineer

Enclosure
cc (Enclosure):
U.S. Nuclear Regulatory Commission
Region II
ATTN: James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Mr. R. J. Clark
Browns Ferry Project Manager
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20814

ENCLOSURE
RESPONSE
PROPOSED IMPOSITION OF CIVIL PENALTIES: EA-84-25
FAILURE TO IDENTIFY AND CORRECT CONDITIONS ADVERSE TO QUALITY, TO SUBMIT REQUIRED REPORTS, AND ADHERE TO THE REQUIREMENTS OF THE TECHNICAL SPECIFICATIONS

Item I.A.

10 CFR 50, Appendix B, Criterion XVI, as implemented by TVA Topical Report, Section 17.2.16, requires the licensee to establish measures to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances, are promptly identified and corrected.

Contrary to the above, from March 18, 1983 through October 13, 1983, one of the unit 2 west scram discharge instrument volume scram level switches (2-LT-85-45A) was inoperable making the number of operable instrument channels less than two. The licensee had information available from scrams occurring on May 30, September 16, September 18, and October 7, 1983 which indicated that level transmitter 2-LT-85-45A was inoperable yet did not correct the problem.

1. Admission or Denial of the Alleged Violation

TVA admits to the violation.

2. Reasons for the Violation if Admitted

At the time of the violation plant procedures regarding post-trip review and analysis did not specifically require an evaluation of the response of the scram discharge instrument volume (SDIV) switches. The cognizant engineer for the system in the Nuclear Central Office (NCO) conducted a system followup review in September 1983. He specifically requested this and other data from the plant. Upon review of the data, the site engineer immediately recognized the problem and reported the situation to the Browns Ferry superintendent and prompt corrective action was subsequently implemented.

3. Corrective Steps Which Have Been Taken and Results Achieved

In the same timeframe of the discovery of this event, Browns Ferry was already working on improvement of the post-trip review and analysis procedure as a result of NRC Generic Letter 83-28, 'Required Actions Based on Generic Implication of Salem ATWS Events.' Plant instruction, TI-74, was approved on December 2, 1983 to upgrade post-trip review by specifically enumerating required reviews. For this particular case, response of the individual SDIV instruments are tabulated and compared to each other. This evaluation has already noted an apparent time delay with the SDIV Magnetrol float switches as reported in our letter dated June 27, 1984 from L. M. Mills to H. R. Denton.

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

The improved post-trip evaluation will continue to be used.

5. Date When Full Compliance Will Be Achieved

Full compliance has been achieved.

Item I.B.

10 CFR 50, Appendix B, Criterion III, requires that design control measures shall provide for verifying or checking the adequacy of design, such as by the performance of design reviews, by the use of alternate or simplified calculative methods, or by the performance of a suitable testing program. Design control measures shall be applied to the delineation of acceptance criteria for test.

Contrary to the above, the requirement was not met in that the post-modification testing (PTM-100) conducted to assure design adequacy on the newly installed differential pressure high level switches (Rosemount 1153DP) (2-LT-85-45A) on the unit 2 scram discharge instrument lines, did not include instrument response timing requirements. A subsequent response timing test on 2-LT-85-45A, conducted on October 14, 1983, revealed an instrument response time of 17.5 minutes. This response time exceeded the currently accepted safety evaluation criteria. Additionally, the monthly surveillance (SI 4.1.A-8) for the scram discharge instrument volume high level instruments did not include specific time response requirements.

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred.

2. Reasons for the Violation if Admitted

The reason for the violation was inadequate review of the unreviewed safety question determination (USQD), and a misunderstanding of time response requirements. As noted in NRC Inspection Report 83-46, it was recognized that the instruments had a slow response time as determined by laboratory tests. However, because of miscommunication and confusing wording in the USQD, the net result was that plant personnel did not understand that timing of the instruments was to be included as a surveillance criteria.

In regard to the post-modification test, we agree that switch timing should have been included. PMT-110 was primarily concerned with hydraulic performance of the SDIV system and utilized the surveillance

instruction discussed above to prove operability of the level instruments. We attribute the omission in part to failure to specify special test requirements. Also, at the time of the installation, procedures were not in place whereas the test group reviewed USQD revisions and special requirements.

Regarding the 'as-found' state of the instrument response time (17.5 minutes), TVA has previously provided an analysis that states 19 minutes as bounding.

3. Corrective Steps Which Have Been Taken and Results Achieved

The defective instrument was promptly removed and replaced. Different type instruments are being installed for long-term use. Response time criteria was included in the instrument surveillance instruction. A special survey of USQD special requirements and revisions was conducted to verify that this type situation was an isolated case.

On a programmatic basis, standard practice 8.3, 'Plant Modifications,' has been strengthened to ensure adequate identification and review of USQD special requirements. Similarly, beginning in April 1983, all workplans were being reviewed by test sections for identification and evaluation of testing requirements. In November 1983, this review was expanded to include a formal review of all modification USQDs with special attention given to testing requirements.

We believe this level of attention is sufficient to prevent recurrence.

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

The differential pressure-type level transmitters will be replaced with a new type during the upcoming unit 2 refueling outage. Units 1 and 3 have since been fitted with the heated referenced resistive temperature devices with good results.

We also believe the current reorganization which is in progress will serve to improve communications between the TVA design and operating staffs.

5. Date When Full Compliance Will Be Achieved

Unit 2 modifications will be completed during fall 1984 refueling outage to achieve full compliance on this item.

Item I.C.

Technical Specification 6.2.B.4.c, as implemented by Browns Ferry Standard Practices 8.3 and 17.8, requires the Plant Operations Review Committee (PORC) to review proposed changes to systems having safety significance which may constitute an unreviewed safety question.

Contrary to the above, the PORC failed to identify the special time response requirement in Revision 8 of Unreviewed Safety Question Determination for Engineering Change Notice (ECN) 0392, dated December 17, 1982, concerning the installation of the scram discharge volume and associated instrumentation. As a result, neither the plant personnel nor the plant manager were aware that the trip signal initiation response for the scram discharge volume high level exceeded the special timing requirement imposed by the engineering design group in ECN 0392, and the original time response for the level instrumentation.

1. Admission or Denial of the Alleged Violation

   TVA admits the violation occurred.

2. Reasons for the Violation if Admitted

   Procedures were not in place to assure PORC review of all USQD revisions after approval of work start.

3. Corrective Steps Which Have Been Taken and Results Achieved

   Standard Practice 8.3 now requires flagging of USQD special requirements for PORC review. Workplan closeout further verifies that stated special requirements have been met.

4. Corrective Steps Which Will Be Taken to Prevent Recurrence

   No further corrective action is required.

5. Date When Full Compliance Will Be Achieved

   Full compliance has been achieved.

Item I.D(1)(2)

I.D 10 CFR 50, Appendix D, Criterion III, requires that measures shall be established for the identification and control of design interfaces and for coordination among paticipating design organizations; that design control measures shall provide for verifying or checking the adequacy of design; and that design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design.

1. Contrary to the above, this requirement was not met in that the emergency equipment cooling water (EECW) diesel-generator heat exchangers were operated, since the original installation, at pressures ranging from 100 to 135 lb/in^2 with the design pressure of the heat exchangers being 75 lb/in^2.

2. Contrary to the above, Engineering Design (EN DES) Engineering Procedure (EP) 1.48 issued December 16, 1983, allowed decisions to be made for a significant nonconforming condition without design control measures commensurate with those applied to the original design. In consequence, 16 emergency diesel-generator cooling heat exchangers and 12 residual heat removal (RHR) pump seal cooling heat exchangers were not targeted for prompt corrective action applying the guidance from EN DES-EP 1.48.

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred.

2. Reasons for the Violation if Admitted

Reason for Violation

I.D(1) - The BFN units 1 and 2 heat exchangers were supplied with the diesel generators packages as part of the nuclear steam supply system (NSSS) purchased in 1966 from General Electric (GE). The unit 3 diesel generators were contracted for by TVA in 1973, to the same specifications as those for units 1 and 2. TVA, in designing the EECW, assumed that the equipment being supplied by GE that utilized EECW was rated for operation at the EECW system pressure. As such, this interface was overlooked at the design review stage.

I.D(2) - The diesel generator EECW heat exchanger design deficiency was originally identified by nonconformance report (NCR) BFNMEB8301. This NCR was later superseded by NCR BFNBWP8311 which identified similar problems with other EECW 'users' including the residual heat removal (RHR) pump seal coolers. Failure evaluation/engineering reports (FE/ERs) provided in accordance with EN DES-EP 1.48 as part of these NCR transmittals supplied engineering evaluations of these conditions to assist in the determination of the condition's reportability to NRC. The FE/ER also provides (when available) recommendations for corrective actions. However, implementation of corrective actions is accomplished not by the issuance of FE/ERs but through the existing design change request (DCR)/engineering change notice (ECN) process. As such, it is our position that the FE/ER is not a part of TVA's design change control process.

For the diesel generator EECW heat exchangers, it was determined that failure of the heat exchangers at the maximum system operating pressure was unlikely. This assessment was based on engineering analysis of the heat exchanger

subcomponents, a successful hydrostatic test of the heat exchangers at a pressure above the maximum system operating pressure, and the previous years of satisfactory service from the heat exchangers at Browns Ferry Nuclear Plant (BFN). As a result, modifications to the EECW for reducing the system pressure at the heat exchanger inlet to the design pressure of the diesel generator heat exchangers were implemented on a schedule that was considered timely by TVA and yet did not perturbate ongoing work of equal or greater priority at BFN. As for the RHR pump seal cooler heat exchangers, TVA had begun replacing the original heat exchangers with a newer model (same 150 lb/in^2g design pressure) when the EECW design pressure discrepancy was identified. However, it was determined that even though the EECW system design pressue was higher than the rated pressure for these heat exchangers (both the origional and new models), the actual EECW system pressure at the heat exchangers was lower than the heat exchanger design pressure (note that the EECW system pressure at the diesel generator heat exchangers was higher than the heat exchanger design pressure). Also, the manufacturer of the new heat exchangers certified to TVA that the heat exchangers were qualified for service at the EECW system design pressure of 185 lb/in^2g. Hence, corrective actions for this condition involve changes in design documentation only. Replacement of the RHR pump seal cooler heat exchangers has been scheduled by TVA in a manner such that previously scheduled work of equal or greater priority would not be adversely impacted. In summary, we consider our scheduling of corrective actions on these conditions to be acceptable and not untimely due to any procedural deficiencies in EP 1.48.

3. Corrective Steps Which Have Been Taken and Results Achieved

ECN P0709 was initiated in November 1983 to install throttling valves in the EECW supply to the diesel-generator heat exchangers to reduce the EECW system operating pressure at the heat exchangers. As of July 1984, all of the throttling valves have been installed and tested.

As noted above, the RHR seal cooler heat exchangers are being replaced by new heat exchangers that are qualified for operation at the EECW system design pressure (185 lb/in^2g). Per L. M. Mills' letter to J. P. O'Reilly dated February 1, 1984, the new heat exchangers have been installed on units 1 and 3.

These modifications will require some minor changes to the information on these systems and components in the Browns Ferry Final Safety Analysis Report (FSAR).

4. Corrective Steps Taken to Avoid Further Noncompliance

Additional investigation of possible pressure rating problems with selected components in the EECW and RHR service water systems have been performed. These investigations have been documented by NCR BFNBWP8406. The replacement RHR seal cooler heat exchangers will be installed during the fall 1984 refueling outage.

5. Date When Full Compliance Will Be Achieved

Upon completion of the modifications in unit 2 cycle 5 refueling outage the FSAR changes will be reflected in the next appropriate update.

Item II.A.

Technical Specification 6.7.2.A.9 required that a prompt (within 24 hours) notification be made upon discovery during plant life of conditions not specifically considered in the safety analysis report or technical specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

(1) Contrary to the above, this requirement was not met in that known deficiencies existed with the scram discharge instrument volume pressure transmitters (Rosemount 1153DP) on unit 2 and these deficiencies were not promptly reported. The response time of level switch 2-LT-85-45A exceeded current safety evaluation criteria. The response time was known by plant personnel to be variable from 15-29 minutes while the accepted maximum response time was approximately 71 seconds. TVA's design organization redesigned the level detector system after determining that the level transmitter response times were 'excessive' (memorandum dated 12/23/82 concerning ECN P03920). This redesign effort was not reported and an evaluation establishing new response time criteria was not conducted until October 14, 1983. During this period the instrument failed to trip in response to high level in the scram discharge instrument volume following four scrams.

(2) Contrary to the above, this requirement was not met in that in March 1983, it was discovered that the diesel generator cooling water heat exchangers were being operated at pressures in excess of the rated pressure and a report acknowledging the design deficiency was not submitted to NRC until November 25, 1983 in Licensee Event Report 50-296/83-26, Revision 4.

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

Item II.A.(1)

1. Admission or Denial of the Alleged Violation

TVA admits to the violation as explained in item 2.

2. Reasons for the Violation if Admitted

We agree that a report was required for the defective transmitter (2-LT-85-45A). As discussed in item I.B, plant staff did not identify existence of a problem until October 1983. Reporting procedures were then promptly initiated.

We do not believe that utilization of the Rosemount transmitter system required a report. Revision 8 to ECN P0392 addressed this situation and approved use of the transmitters. This matter was dispositioned prior to unit startup. The redesign effort initiated by EN DES was at the explicit request of NCO cognizant engineers who recognized the long-term need for more suitable instrumentation.

3. Corrective Steps Which Have Been Taken and Results Achieved

A telecopied event report on instrument 2-LT-85-45A was made on October 14, 1983 and a written report was made on October 24, 1983. The response time criteria was included in the surveillance instruction to identify recurrences or reportability.

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

No further corrective steps are required.

5. Date When Full Compliance Will Be Achieved

Full compliance has been achieved.

Item II.A.(2)

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred.

2. Reasons for the Violation if Admitted

TVA failed to recognize that deficiency was reportable under technical specification 6.7.2.a.(a).

3. Corrective Steps Which Have Been Taken and Results Achieved

The event was reported on November 25, 1983. All determinations for reportability are now made by a single staff (Compliance Section) at Browns Ferry.

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

No further steps are necessary. We do note that the new reporting rule has clarified reporting requirements in general.

5. Date When Full Compliance Will Be Achieved

Full compliance has been achieved.

Item III.A.

Technical Specification 4.1.C requires upon determining that a reactor protection system (RPS) channel is failed in an unsafe condition, that the other RPS channel monitoring the same variable be functionally tested immediately before the trip system containing the failure is tripped.

Contrary to the above, on October 13, 1983, when it was determined that 2-LT-85-45A, an 'A' RPS level transmitter for the SDIV, failed in the unsafe condition, the required channel functional test for RPS channel 'B' was not performed. The functional test was not performed until the NRC resident inspector notified the licensee of the requirement in the plant technical specifications.

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

1. Admission or Denial of the Alleged Violation

TVA admits the violation.

2. Reasons for the Violation if Admitted

Attention was focused on tripping the inoperable channel and the requirement to test the alternate channel prior to tripping the inoperable channel was thus overlooked.

3. Corrective Steps Which Have Been Taken and Results Achieved

Involved personnel were admonished regarding failure to adhere to the technical specification criteria for testing of redundant instrument channels.

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

No further recurrence control is required. Standard technical specifications have a similar but more logical specification on this matter. We intend to propose a technical specification incorporating this methodology in the very near future.

5. Date When Full Compliance Will Be Achieved

Full compliance has been achieved.

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

JUL 30 1984

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

Gentlemen:

SUBJECT: PROPOSED CIVIL PENALTY ACTION: EA 84-52
INADEQUATE ADMINISTRATIVE CONTROL OF SNUBBER SERVICE LIFE MONITORING PROGRAM (REFERENCE INSPECTION REPORT NOS. 50-280/84-11 AND 50-281/84-11)

A routine inspection was conducted by an NRC Region II inspector on March 20-23, 1984. This inspection included a review of the Surry Nuclear Station Snubber Service Life Monitoring Program (SLMP) administrative and managerial controls to assure the adequacy of the program. The findings of the inspection were discussed witn facility management at the conclusion of the inspection and are contained in the inspection reports referenced. NRC concerns were discussed by the Regional Administrator of Region II with senior corporate management at an Enforcement Conference held at the NRC Region II Office on April 17, 1984.

The inspection findings established that the system for utilizing and controlling the snubber service life monitoring program was not adequate at the Surry facility. The Surry SLMP assumed that all hydraulic snubbers had been rebuilt during the steam generator replacement project (July 1980 for Unit 2 and July 1981 for Unit 1). A review of snubber maintenance records, which was prompted after discovering that some snubber failures were caused by incorrect seal material, disclosed that not all snubbers had been rebuilt during the steam generator replacement project. Therefore, the snubber program could not have detected program inadequacies (i.e., incorrectly designated snubber service life dates).

The NRC attaches great importance to comprehensive licensee programs for the detection, correction, and reporting of problems that may constitute or lead to violations of regulatory requirements. In this case, your program did not detect the program inadequacies in a timely manner. It was fortuitous that larger numbers of inadequate snubbers were not present. Meticulous and continuing attention by both management and technically qualified personnel must be provided to ensure proper performance of safety-related activities. We do note that once the magnitude of the problem became apparent to facility management, appropriate near-term corrective action was initiated.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

To emphasize the seriousness of this violation, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Forty Thousand Dollars ($40,000) for the violation described in the enclosed Notice. The violation has been categorized at Severity Level III, in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, 49 FR 8583 (March 8, 1984). The base civil penalty for a Severity Level III violation is $50,000. However, since the violation cited occurred prior to issuance of the current Enforcement Policy, the base civil penalty amount under the previous Enforcement Policy, 47 FR 9987 (March 9, 1982) of $40,000 is proposed.

You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. Your response should specifically address the effectiveness of corrective actions stated in your Licensee Event Reports of April 16 and 25, 1984, regarding your service life monitoring program for control of snubber maintenance and tracking. In your response, appropriate reference to previous submittals is acceptable.

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

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

Sincerely,

Robert D. Martin for

James P. O'Reilly
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
J. H. Ferguson
Chief Operating Officer
W. S. Mistr, Manager - Security
J. L. Wilson, Station Manager

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Virginia Electric and Power Company
Surry Units 1 and 2

Docket Nos. 50-280 and 50-281
License Nos. DPR-32 and DPR-37
EA 84-52

A routine inspection was performed on March 20-23, 1984 by a Region II inspector as documented in Inspection Report Nos. 50-280/84-11 and 50-281/84-11. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, 49 FR 8583 (March 8, 1984), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the violation identified during the inspection and associated penalty are set forth below:

Technical Specification 4.17.F.1 requires that a snubber service life monitoring program be established to maintain a service life of each snubber, the date at which the designated service life commences, and the installation and maintenance records on which the designated service life is based.

Technical Specification 4.17.F.2 requires that concurrent with the first in-service visual inspection and at least once per 18 months thereafter, safety-related snubbers shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review.

Contrary to the above, the program implemented to monitor the service life of hydraulic snubbers was inadequate in that:

1. The selected date of July 1980, the date at which the designated service life of the Unit 2 snubbers commenced, was incorrect for a number of Unit 2 snubbers. Also, the selected date of July 1981, the date at which the designated service life of the Unit 1 snubber commenced, was incorrect for a number of Unit 1 snubbers.

2. Safety-related snubbers were not reviewed as required by Technical Specification 4.17.F.2 to verify that the indicated service life of the snubber would not be exceeded prior to the next scheduled snubber service life review. As a result, the service life of a number of Unit 1 and Unit 2 snubbers was exceeded.

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

Pursuant to 10 CFR 2.201, Virginia Electric and Power Company is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, with a copy to this office, within 30 days of the date of this Notice, a written statement or explanation, including for the alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, the response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Virginia Electric and Power Company may pay the civil penalty in the amount of Forty Thousand Dollars ($40,000) for the violation, or may protest imposition of the civil penalty in whole or in part by a written answer. Should Virginia Electric and Power 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 Virginia Electric and 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 addressed in Section V(B) of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate statements or explanations by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Virginia Electric and Power Company's attention is directed to the other provisions of 10 CFR 2.205 regarding the procedure for imposing a civil penalty.

Upon failure to pay the 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

Robert D. Martin for

James P. O'Reilly
Regional Administrator

Dated in Atlanta, Georgia
this 30th day of July 1984

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

September 7, 1984

Mr. Richard C. DeYoung, Director
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, D. C. 20555

Serial No. 474A
NO/DWL:acm
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Dear Mr. DeYoung:

We have reviewed your Proposed Civil Penalty Action (EA 84-52) letter of July 30, 1984 in reference to the inspection conducted at Surry Power Station between March 20, 1984 and March 23, 1984 and reported in IE Inspection Report Nos. 50-280/84-11 and 50-281/84-11. Our response to the specific infraction is attached.

Vepco is committed to operating our nuclear units in a totally professional manner and is aggressively pursuing improvements in our activities. We are, at the corporate level, presently conducting a thorough assessment of compliance programs, including the snubber programs at both Surry and North Anna Power Stations. These reviews address not only the technical and procedural, but also the organizational and policy aspects of the programs. The objective of this assessment is to insure the programs are in full compliance with the requirements.

We have determined that no proprietary information is contained in the report. Accordingly, the Virginia Electric and Power Company has no objection to this inspection report being made a matter of public disclosure. The information contained in the attached pages is true and accurate to the best of my knowledge and belief.

Very truly yours,

W. L. Stewart

Attachments
1. Response to Notice of Violation
2. Voucher Check in payment of Civil Penalty (Check No. 39613)

cc: Mr. James P. O'Reilly
Regional Administrator
Region II

Mr. D. J. Burke
NRC Resident Inspector
Surry Power Station

RESPONSE TO NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY

NRC COMMENT:

A routine inspection was performed on March 20-23, 1984 by a Region II inspector as documented in Inspection Report Nos. 50-280/84-11 and 50-281/84-11. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, 49 FR 8583 (March 8, 1984), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2282, PL 960295, and 10 CFR 2.205, the violation identified during the inspection and associated penalty are set forth below:

> Technical Specification 4.17.F.2 requires that concurrent with the first in-service visual inspection and at least once per 18 months thereafter, safety-related snubbers shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review.
>
> Contrary to the above, the program implemented to monitor the service life of hydraulic snubbers was inadequate in that:
>
> 1. The selected date of July 1980, the date at which the designated service life of the Unit 2 snubbers commenced, was incorrect for a number of Unit 2 snubbers. Also, the selected date of July 1981, the date at which the designated service life of the Unit 1 snubber commenced, was incorrect for a number of Unit 1 snubbers.
>
> 2. Safety-related snubbers were not reviewed as required by Technical Specification 4.17.F.2 to verify that the indicated service life of the snubber would not be exceeded prior to the next scheduled snubber service life review. As a result, the service life of a number of Unit 1 and Unit 2 snubbers was exceeded.
>
> This is a Severity Level III violation (Supplement I).
> (Civil Penalty - $40,000)

1. ADMISSION OR DENIAL OF ALLEGED VIOLATIONS

The violations are correct as stated.

2. REASONS FOR THE VIOLATIONS

As stated in the Proposed Civil Penalty Action EA 84-52 dated July 30, 1984, the Surry service life monitoring program start dates were based on the assumption that all hydraulic snubbers had been completely overhauled and rebuilt during each Unit's steam generator replacement outage (July 1980 for Unit 2 and July 1981 for Unit 1). However, a number of snubber failures caused by seal problems prompted a records review which did not support this assumption.

3. CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

The records review revealed a complete maintenance package in the case of some of the snubbers confirming that an overhaul had been completed. The review also produced a list of snubbers for each unit whose service life start date could not be confirmed because of:

- o incomplete documentation indicating the snubber was only partially overhauled
- o inconclusive documentation which lacked sufficient identification to match an installed snubber
- o no documentation at all.

This issue was also addressed in Vepco's Licensee Event Reports dated April 16 and April 23, 1984. In these reports we outlined corrective actions taken or planned regarding our service life monitoring program for control of snubber maintenance and tracking. The results of these corrective actions are discussed below.

Snubbers whose service life start date could not be confirmed were either rebuilt or replaced during the March 1984 Unit 2 outage and the April 1984 Unit 1 outage as committed to in W. L. Stewart's March 30, 1984 letter Serial No. 190 to James P. O'Reilly.

The entire snubber program was reviewed, resulting in modifications to the governing Administrative Procedure and snubber Maintenance Procedures, and the development of a computerized service life monitoring program. Two new procedures were also generated; one for controlling the marking and identification of snubbers and another in the form of a Performance Test requiring periodic and timely record updates.

The Administrative Procedure was revised to clarify departmental responsibilities and requirements for visual and functional testing including acceptance criteria. Also, it provides a detailed methodology for identifying and marking snubbers and detailed requirements for service life monitoring. The Maintenance Procedure revisions included segregating the overhaul procedures from the testing procedures, discontinuing partial overhauls without a procedure deviation, and modifying the removal and reinstallation procedure to assure proper identification mark number recording.

Concurrent with these changes, a computer-based service life monitoring program was initiated. This program lists snubbers chronologically by service life expiration date. The initial data entry was based on firm auditable records that document the snubber service life start date.

We believe these actions have resulted in an effective program which includes procedural controls designed to preclude the possibility of missed surveillance or a snubber exceeding its service life. The long term effectiveness of the program will be audited by our QA department and we are confident that the corrective actions taken will result in improved snubber reliability.

4. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

The computer program in use, although adequate for service life monitoring, lacks the capability for tracking and trending all aspects of snubber maintenance and surveillance. Certain aspects are currently performed manually. Consequently, other commercially available programs which will provide this additional capability are under review. The implementation of a more flexible complete program will minimize the possibility of recurrence of this violation by providing pertinent data on snubbers in one readily accessible, easily sorted file.

5. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance was achieved with the replacement and rebuilding of snubbers whose service life had been exceeded and with the revisions to the program procedures.

The computer program discussed above, although not a requirement, will aid in assuring that the program remains in full compliance.

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

NO CIVIL PENALTY

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

JUL 11 1984

Docket No. 50-255
License No. DPR-20
EA 84-38

Consumers Power Company
ATTN: Mr. R. B. DeWitt
Vice President
Nuclear Operations
212 West Michigan Avenue
Jackson, MI 49201

Gentlemen:

This refers to the special safety inspection conducted by Messrs. P. C. Lovendale and L. R. Greger of the Region III staff on March 22-23, 1984 of activities at the Palisades Nuclear Generating Plant, authorized by the NRC Provisional Operating License No. DPR-20. The results of this special inspection were discussed with Mr. R. Montross and others of your staff at the conclusion of the inspection and during an enforcement conference on April 27, 1984 at the NRC Region III office. The special inspection was conducted to review the circumstances surrounding an unplanned radiation exposure received by a worker during diving operations in the refueling cavity.

The inspection showed that an individual was allowed to enter a high radiation area (refueling cavity) without proper radiological controls. Upon review of this matter, we have concluded that an exposure in excess of 10 CFR Part 20 limits occurred. This incident is of significant regulatory concern because it evidences a breakdown in your radiation protection program.

An incident concerning radiological diving operations was brought to your attention in IE Information Notice No. 82-31, "Overexposure of Diver During Work in Fuel Storage Pool," dated July 30, 1982. However, this information was not utilized by your staff during diving operations in the refueling cavity tilt machine area on March 18, 1984. The performance of your radiation protection staff in this incident appears to be a departure from the otherwise good performance we have observed during recent inspections.

After consultation with the Director, Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation. The violations described in the attached Notice of Violation, involving the unplanned radiation exposure, are classified as a Severity Level III problem in accordance with the NRC Enforcement Policy. Normally, a civil penalty is proposed for Severity Level III violations. However, after considering all relevant circumstances, including your prompt identification and reporting of the event, your good prior performance in this area, the

overall improvements made in your radiation safety program over the last few years, and our belief that this was an isolated event in light of the significant number of well-controlled entries into high radiation areas made during the current outage, we have exercised our discretion and have decided not to propose a civil penalty in this case.

In response to this letter, please follow the instructions in the enclosed Notice. Your response should specifically address the corrective actions you have taken or plan to take for ensuring that unnecessary exposures resulting from radiological diving operations will not occur again at the Palisades facility. Your written reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room unless you notify this office, by telephone, within ten days of the date of this letter and submit written application to withhold information contained therein within thirty days of the date of this letter. Such application must be consistent with the requirements of 2.790(b)(1). If we do not hear from you in this regard within the specified periods noted above, a copy of this letter, the enclosure, and your response to this letter will be placed in the Public Document Room.

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

Sincerely,

James G. Keppler
Regional Administrator

Enclosure: Notice
of Violation

cc w/encl:
D. J. VandeWalle, Nuclear
Licensing Administrator
R. W. Montross, Manager
Ronald Callen, Michigan
Public Service Commission
W. Teegardin, Underwater
Constructors, Inc.

NOTICE OF VIOLATION

Consumers Power Company
Palisades Nuclear Generating Plant

Docket No. 50-255
License No. DPR-20
EA 84-38

As a result of an inspection conducted on March 22-23, 1984, and in accordance with the General Statement of Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), the following violations were identified:

A. 10 CFR 20.101(b) states in part that during any calendar quarter total occupational dose to the whole body of an individual shall not exceed 3 rems. "Dose to the whole body" is deemed to include any dose to the whole body, gonads, active blood-forming organs, head and trunk, or lens of eye.

Contrary to the above, an individual who worked as a diver in the refueling cavity during the first calendar quarter in 1984 received a dose of about 4.5 rems to the right leg above the knee, a portion of the body covered by the whole body dose limit of 3 rems per quarter.

B. Technical Specification 6.12 requires that any individual entering a high radiation area be provided with a dose rate monitoring device, or be provided with a dose rate integrating device which alarms at a preset dose (surveyed areas only), or be accompanied by an individual qualified in radiation protection procedures who is equipped with a dose rate monitoring device, who provides positive control over activities, and who performs periodic surveys as specified by the radiation work permit.

Contrary to the above, on March 18, 1984, a diver made three entries into the refueling cavity tilt machine area, a high radiation area, without being provided with a dose rate monitoring device or a dose rate integrating device or without being accompanied by an individual qualified in radiation protection who was equipped with a dose rate monitoring device and who provided the required controls and monitoring.

C. Technical Specification 6.11 states that procedures for personal radiation protection shall be prepared consistent with 10 CFR Part 20 and shall be approved, maintained, and adhered to for all operations involving personal radiation exposure.

1. Procedure No. 7.02, "ALARA Program," requires that an ALARA review be conducted if, among other things, a potential exists for individual exposure to general area radiation levels greater than 1000 mrems/hour; an individual is expected to exceed 1500 mrems whole body dose for a given task in a calendar year; or loose surface contamination exceeds 100,000 dpm/100cm^2.

   Contrary to the above, no ALARA review was conducted of the refueling cavity tilt machine repair job even though surveys and dose estimates indicated that dose rates might exceed 1000 mrem/hour, that the diver's whole body dose was expected to exceed 1500 mrems for the job, and that contamination levels (dry) exceeded 100,000 dpm/100 cm^3.

2. Procedure No. 7.03, "Radiation Work Permit," requires that a job be secured (stopped) if unplanned changes in working conditions occur which might invalidate the basis for an applicable radiation work permit.

   Contrary to the above, the refueling cavity tilt machine repair job was not stopped even though radiation levels in the work area as high as seven times greater than those identified on the radiation work permit were identified.

3. Procedure No. HP 2.14, "Radiological Survey Requirements," states that radiation work permits shall include applicable requirements for continuous, intermittent, and/or pre-job and post-job surveys.

   Contrary to the above, the radiation work permit written for the refueling cavity tilt machine repair job did not contain any survey requirements. Surveys conducted during the diving operation were not sufficient to identify the existing radiological conditions.

D. 10 CFR 20.401 requires that records be maintained of surveys made by the licensee to determine compliance with NRC regulations.

   Contrary to the above, no records were maintained of radiation surveys conducted on March 18, 1984, to assess the underwater radiation hazards present in the refueling cavity tilt machine area.

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

Pursuant to the provisions of 10 CFR 2.201, you are required to submit to this office within thirty days of the date of this Notice a written statement or explanation in reply, including for each item of compliance: (1) corrective action taken and the results achieved; (2) corrective action to be taken to avoid further noncompliance; and (3) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

For The Nuclear Regulatory Commission

James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 10th day of July 1984

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

AUG 15 1984

Docket: 50-298/84-12
EA 84-76

Nebraska Public Power District
ATTN: J. M. Pilant, Manager, Technical
Staff-Nuclear Power Group
P.O. Box 499
Columbus, Nebraska 68601

Gentlemen:

This refers to the inspection conducted by Dr. J. B. Nicholas of this office during the period of June 4-8, 1984 of the activities authorized by NRC Operating License DPR-46 for Cooper Nuclear Station, and to the discussion of our findings with Mr. P. V. Thomason and other members of your staff at the conclusion of the inspection.

Areas examined during the inspection included transportation and solid radwaste activities, outstanding open items, and nonlicensed training. Within these areas, the inspection consisted of selective examination of procedures and representative records, interviews with personnel and observations by the NRC inspector. The inspection findings are documented in the enclosed inspection report. During this inspection, it was found that certain of your activities were in violation of NRC requirements.

The violation described in the attached Notice of Violation, involving transportation of licensed material, is classified as a Severity Level III violation in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C). Normally, a civil penalty is proposed for Severity Level III violations. However, the violation for which you are cited has already been the subject of enforcement action by the State of Nevada. On May 15, 1984, the State of Nevada imposed the following sanctions: (1) an administrative penalty of $3,000, and (2) suspension of Radioactive Waste Permit Q401 for a period of 1 year. The State of Nevada has also required the Nebraska Public Power District to submit for review changes in the quality assurance program, the quality control program, and the training program for employees. This corrective action should prevent recurrence of the violation. In view of the circumstances surrounding this matter, we have exercised our discretion under the NRC Enforcement Policy and have decided not to propose a civil penalty.

You are required to respond to this violation, in writing, in accordance with the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Your response should be based on the specifics contained in the Notice of Violation enclosed with this letter. After reviewing your response to this Notice of Violation and your proposed corrective actions, the NRC will determine whether further NRC enforcement action is necessary to to ensure compliance with NRC regulatory requirements.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room unless you notify this office, by telephone, within 10 days of the date of this letter, and submit written application to withhold information contained therein within 30 days of the date of this letter. Such application must be consistent with the requirements of 2.790(b)(1).

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

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

Sincerely,

for J. T. Collins
Regional Administrator

Enclosures:
1. Appendix A - Notice of Violation
2. Appendix B - NRC Inspection Report 50-298/84-12

cc w/enclosure:
Paul V. Thomason, Division Manager
of Nuclear Operations
Cooper Nuclear Station
P.O. Box 98
Brownville, Nebraska 68321

APPENDIX A

NOTICE OF VIOLATION

Nebraska Public Power District
Cooper Nuclear Station

Docket: 50-298/84-12
License: DPR-46
EA 84-76

Based on the results of an NRC inspection conducted during the period of June 4-8, 1984, and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C), 49 FR 8583, dated March 8, 1984, the following violation was identified:

Transportation of Licensed Material

10 CFR Part 71.5(a), "Transportation of Licensed Material," requires that no licensed material shall be transported outside of the confines of the licensee's plant unless the requirements of the regulations appropriate to the mode of transportation of the Department of Transportation in 49 CFR Parts 170 through 189 are met. 49 CFR Part 173.441(b)(3) states that the radiation dose rate shall not exceed 10 millirem per hour at any point 2 meters (6.6 feet) from the vertical planes represented by the outer lateral surfaces of the vehicle.

Contrary to the above, on May 10, 1984, a shipment of licensed material received at the Beatty, Nevada, low-level waste site was found by a state of Nevada inspector to have a radiation dose rate at 2 meters from either side of the trailer in excess of 10 millirem per hour.

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

Pursuant to the provisions of 10 CFR 2.201, Nebraska Public Power District is hereby required to submit to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) the corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

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

JUL 11 1984

Docket Nos. 50-213
50-245
License Nos. DPR-61
DPR-21

EA 84-2

Northeast Nuclear Energy Company/
Connecticut Yankee Atomic Power Company
ATTN: Mr. W. G. Counsil
Senior Vice President - Nuclear
Engineering and Operations Group
P. O. Box 270
Hartford, Connecticut 06101

Gentlemen:

Subject: NOTICES OF VIOLATION (NRC INSPECTION NO. 50-213/83-25 AND 50-245/84-07)

This refers to the special announced team inspection conducted October 24-28, 1983 at the Haddam Neck Plant of activities authorized by NRC License No. DPR-61, specifically, the adequacy of the licensee's implementation of five task actions identified in NUREG-0737, Clarification of TMI Action Plan Requirements. The results of this inspection were forwarded to you on November 9, 1983. During the inspection, violations of NRC requirements were identified. This also refers to a similar special announced inspection conducted April 2-6, 1984, at Millstone, Unit 1, of activities authorized by NRC License No. DPR-21. During the inspections, violations of NRC requirements were identified. On November 14, 1983, an enforcement conference was held with Mr. John Opeka and other members of your staff during which the violations at the Haddam Neck facility, their causes, and your corrective actions were discussed. The violations which are described in the enclosed Notices involved the failure at each facility of the Post-Accident Sampling System (PASS) to satisfy the specifications of NUREG-0737 as required by Order.

At Haddam Neck, the failure of the PASS involved the inability to obtain a containment atmosphere sample in a post-accident condition. This failure was caused by inadequate design control, an inadequate preoperational test of the system, and inadequate system operating procedures. Design control was inadequate in that the configuration of a valve in the system, as described in a

vendor drawing, was incorrectly incorporated in the construction drawings. As a result, the valve was installed incorrectly, thereby defeating the ability of the PASS to obtain post-accident containment atmosphere samples. The preoperational test was inadequate in that it did not test the ability of the PASS to obtain an actual containment sample but only tested gas flow through this system which resulted in a misconception that the system was fully operational. The system operating procedures were inadequate in that proper valve alignments were not specified and the specified analytical sensitivities could not be achieved.

At Millstone, Unit 1, the failure of the PASS involved the inability to obtain a reactor coolant sample in one of the post-accident conditions, specifically, whenever the reactor is depressurized. This failure was caused by a failure to install the system piping in accordance with approved drawings, and failure to have an adequate preoperational test of the system. The preoperational test was inadequate, as it was at Haddam Neck, in that it did not test the ability of the PASS to obtain a reactor coolant sample, but only tested gas flow through this system which resulted in the misconception that the system was fully operational.

The PASS was required to be retrofit in nuclear plants as a result of extensive reviews of the lessons from the TMI accident. The inoperability of this system at the Haddam Neck and Millstone, Unit 1, facilities is of significant concern to the NRC because of the failure of the multiple levels of review to identify and correct this situation. Apparently, the Quality Assurance program was deficient in that it allowed a major discrepancy in the design drawings at Haddam Neck to go undetected. The Plant Operations Review Committee (PORC) review at Haddam Neck was also deficient in that PORC approved both the drawing depicting the wrong valve configuration and the inadequate preoperational test procedure. Similarly, the PORC review was deficient at Millstone, Unit 1, in that PORC approved the inadequate preoperational test procedure. These examples raise the question of the effectiveness and independence of your modification review process and they indicate that adequate management attention was not given to the design, installation, and testing of this important system. As a result of these deficiencies, inaccurate information regarding operability of the PASS's was submitted to the NRC.

The violation at Haddam Neck, which is set forth in Enclosure 1, has been categorized as a Severity Level III violation in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C. The violation at Millstone, Unit 1, which is set forth in Enclosure 2, has also been categorized as a Severity Level III violation. The base civil penalty for a Severity Level III violation is $40,000. The base civil penalties for these violations have been mitigated in their entirety, in accordance with the Enforcement Policy, because

of the good prior performance demonstrated at these facilities. You should be aware, however, that if similar violations occur in the future, any base civil penalty can be escalated by as much as 100%.

You are required to respond to the enclosed Notice and should follow the instructions specified therein when preparing your response. In your response, you should describe the specific action taken or planned at each facility to (1) improve the review of design control and preoperational testing, including reviews by PORC, and (2) improve the system operating procedures. Your written 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 its enclosure will be placed in the NRC Public Document Room.

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

Sincerely,

T E Murley

Thomas E. Murley
Regional Administrator

Enclosure:
1. Notice of Violation - Haddam Neck
2. Notice of Violation - Millstone, Unit 1

cc w/encls:
R. Graves, Plant Superintendent, Haddam Neck
D. O. Nordquist, Manager of Quality Assurance
R. T. Laudenat, Manager, Generation Facilities Licensing
J. F. Opeka, Vice President, Nuclear Operations
E. J. Mroczka, Station Superintendent, Millstone, Unit 1
Gerald Garfield, Esquire

NOTICE OF VIOLATION

Connecticut Yankee Atomic Power Company
Haddam Neck Plant

Docket No. 50-213
License No. DPR-61
EA 84-2

Following the accident at Three Mile Island, the Nuclear Regulatory Commission (NRC) staff developed an "Action Plan," NUREG-0660, to provide a comprehensive and integrated plan to improve safety at nuclear power plants. This document and NUREG-0737, "Clarification of TMI Action Plan Requirements," describes requirements that must be implemented by operating reactors, and also provides guidance to licensees regarding schedules, applicability, submittal dates, and clarification of technical positions. On March 17, 1982, the NRC issued Generic Letter 82-05 to all licensees of operating power reactors. The letter required licensees to provide, in accordance with the requirements of 10 CFR 50.54(f), specific information and commitments relative to certain action items contained in NUREG-0737, including item II.B.3, "Post-Accident Sampling Capability." The NRC issued an "Order Confirming Licensee Commitments On Post-TMI Related Issues" to the Connecticut Yankee Atomic Power Company on March 14, 1983, which required installation of an upgraded post-accident sampling capability at Haddam Neck by March 31, 1983.

On October 22, 1983, in preparation for an NRC inspection, the licensee conducted a more complete functional test of the Post-Accident Sampling System (PASS) and determined that the PASS was not operational. The preoperational test previously conducted by the licensee to verify system operability was not a full system test. On October 24-28, 1983, the NRC conducted an inspection to review the licensee's PASS. As a result of the inspection, the NRC concluded that this violation was caused by lack of proper system design control, inadequate preoperational testing of the system, and inadequate system operating procedures.

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

A. In an "Order Confirming Licensee Commitments On Post TMI Related Issues," dated March 14, 1983, the Nuclear Regulatory Commission, ordered the licensee to implement and maintain specific items, as described in the Attachments to the Order, in the manner described in the licensee's submittals noted in Section III of the Order, and no later than the dates in the Attachments to the Order.

   Section III of the Order identified a licensee submittal dated June 10, 1982 which stated, "The post accident sampling system (PASS) has been installed, and operational testing and operator training has been completed at the Haddam Neck Plant."

Attachment 1 to the Order required the installation of an upgraded post-accident sampling capability by March 31, 1983.

Contrary to the above, an upgraded post-accident sampling capability, was not implemented and maintained in a manner described in submittals to the NRC in that on October 22, 1983, the licensee did not have the capability of obtaining containment atmosphere samples in the post-accident condition because of the improper installation of a three-way valve, SS-MOV-174.

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

B. Technical Specification 6.8, requires that written procedures and administrative policies shall be established, implemented and maintained that meet or exceed the requirements and recommendations of Section 5.1 and 5.3 of ANSI N18.7-1976 and Appendix "A" of USNRC Regulatory Guide 1.33.

Contrary to the above, established procedures involving the post-accident sampling system were not sufficient to meet this requirement, as evidenced by the following examples.

1. Regulatory Guide 1.33, Appendix A, Section 9.d. specifies that procedures that could be categorized either as maintenance or operating procedures should be developed for the exercise of equipment that is normally idle but that must operate when required.

   ANSI 18.7-1976, Section 5.3.4.1 states, "Start-up procedures shall include provisions for documented determination that prerequisites have been met, including confirmation that necessary instruments are operable and properly set; valves are properly aligned; necessary systems procedures, tests and calibrations have been completed; and required approvals have been obtained. Checkoff lists are normally used for this purpose."

   However, as of October 24, 1983, Procedure EPIP 1.5-39, "Post-Accident Sampling of Reactor Coolant," dated June 16, 1983 was not adequately established for post-accident sampling equipment that is normally idle but must operate when required in that:

   a. The procedure did not include any prerequisite, provision or confirmation pertaining to the proper alignment of the drain header valves necessary for the acquisition of a reactor coolant sample.

   b. The procedure did not indicate the proper valve alignment sequence, in that the sequence specified caused an excessively high differential pressure such that one of the isolation valves, SS-SOV-167, would not open against operating reactor system pressure, preventing sample acquisition until the procedure was modified.

2. Regulatory Guide 1.33, Appendix A, Section 10, states that, "Chemical and radiochemical control procedures should specify laboratory instructions and calibration of laboratory equipment and that extreme importance must be placed on laboratory procedures used to determine concentration and species of radioactivity in liquids and gases prior to release, including representative sampling, validity of calibration techniques, and adequacy of analyses."

   However, as of October 26, 1983, the procedures and laboratory equipment used for the analyses of samples required from the post-accident sampling system were not sufficient to accurately measure concentrations relative to radioactivity, chloride, boron, total gas and hydrogen within the accuracy specified in NUREG-0737 and the licensee's commitments.

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

Pursuant to 10 CFR 2.201, Connecticut Yankee Atomic Power Company is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, with a copy to this office, within 30 days of the date of this Notice, a written statement or explanation, 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. Considerations may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, the response shall be submitted under oath or affirmation.

FOR THE NUCLEAR REGULATORY COMMISSION

T E Murley

Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 11th day of July 1984

NOTICE OF VIOLATION

Northeast Nuclear Energy Company
Millstone, Unit 1

Docket No. 50-245
License No. DPR-21
EA 84-2

Following the accident at Three Mile Island, the Nuclear Regulatory Commission (NRC) staff developed an "Action Plan", NUREG-0660, to provide a comprehensive and integrated plan to improve safety at nuclear power plants. This document and NUREG-0737, "Clarification of TMI Action Plan Requirements", describes requirements that must be implemented by operating reactors, and also provides guidance to licensees regarding schedules, applicability, submittal dates, and clarification of technical positions. On March 17, 1982, the NRC issued Generic Letter 82-05 to all licensees of operating power reactors. The letter required licensees to provide, in accordance with the requirements of 10 CFR 50.54(f), specific information and commitments relative to certain action items contained in NUREG-0737, including item II.B.3, "Post-Accident Sampling Capability." The NRC issued an "Order Confirming Licensee Commitments On Post-TMI Related Issues" to the Northeast Nuclear Energy Company on March 14, 1983, which required installation of an upgraded post-accident sampling capability by April 1, 1983.

On November 10, 1983, the licensee, prompted by the previous discovery of an improper installation of the Post-Accident Sampling System (PASS) at the licensee's Haddam Neck Plant, performed a complete functional test of the PASS for Millstone, Units 1 and 2 and discovered that the PASS system was not fully operational at Unit 1 because of improper installation. The preoperational test previously conducted by the licensee to verify system operability was not a full system test. On April 2 - 6, 1984, the NRC conducted an inspection to review the licensee's PASS, and verified that the deficiencies were corrected at Millstone and that the system was operational. During the inspection, the NRC concluded that this violation was caused by failure to install the system in accordance with approved drawings, and inadequate preoperational testing of the system.

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

A. In an "Order Confirming Licensee Commitments On Post TMI Related Issues," dated March 14, 1983, the Nuclear Regulatory Commission, ordered, effective immediately, the licensee to implement and maintain specific items, as described in the Attachments to the Order, in the manner described in the licensee's submittals noted in Section III of the Order, and no later than the dates in the Attachments to the Order.

   Section III of the Order identified a licensee submittal dated June 10, 1982 which stated, "The post accident sampling system (PASS) has been installed, and operational testing and operator training has been completed at Millstone Unit No. 1."

Attachment 1 to the Order required the installation of an upgraded post-accident sampling capability by April 1, 1983.

Contrary to the above, an upgraded post-accident sampling capability, in a manner described in submittals to the NRC, was not implemented and maintained in that on November 10, 1983, the licensee did not have the capability of obtaining reactor coolant samples in one of the post-accident conditions namely, whenever the reactor is depressurized, because of the improper installation of sample acquisition and flush piping connected to the Shutdown Cooling System.

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

Pursuant to 10 CFR 2.201, Northeast Nuclear Energy Company is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555, with a copy to this office, within 30 days of the date of this Notice, a written statement or explanation, 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. Considerations may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, the response shall be submitted under oath or affirmation.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 11th day of July 1984

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

SEP 24 1984

Docket No. 50-275
License No. DPR-76
EA 84-88

Pacific Gas and Electric Company
ATTN: J. O. Schuyler, Vice President
Nuclear Power Generation
77 Beale Street, Room 1435
San Francisco, California 94106

Gentlemen:

In July 1977, Pacific Gas and Electric Company (PG&E) requested Pullman Power Products to obtain an independent audit of its quality assurance program. Pullman, with PG&E's concurrence, selected Nuclear Services Corporation (NSC) to perform the audit, which was subsequently conducted between August 22 and September 20, 1977. PG&E received a copy of the audit report in February 1978. The NSC audit identified problems with Pullman's quality assurance program. PG&E, after completing its own review of the NSC findings on June 1, 1978, determined that the problems did not reveal a significant breakdown in quality assurance.

At the time that the NSC audit was conducted and was being reviewed by Pullman and PG&E, the Atomic Safety and Licensing Board, on its own initiative, was considering the issue of quality assurance in the Diablo Canyon operating license proceeding. PG&E did not report the existence of the NSC audit to the NRC during this phase of the licensing process.

On October 20, 1983, the Joint Intervenors filed a motion to revoke the low power license for Diablo Canyon Nuclear Power Plant Unit No. 1 or, alternatively, to continue the suspension of the license on the basis that PG&E had failed to make NRC aware of the 1977 NSC audit. In a decision dated March 26, 1984 (DD-84-8, 19 NRC 924), the Director, Office of Inspection and Enforcement (Director), denied the Joint Intervenors' petition. However, the Director found that PG&E's failure to report the results of the NSC audit to the NRC constituted a material false statement under section 186 of the Atomic Energy Act of 1954, as amended, and that issuance of a Notice of Violation was appropriate. Intent to mislead or to withhold information is not a prerequisite to the finding of a material false statement under section 186. No intent to mislead was found in this case.

On August 20, 1984, the Commission issued an Order affirming the Director's decision to issue a Notice of Violation, and directed that the violation be classified as a Severity Level III violation in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C).

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Normally, a civil penalty is proposed for a Severity Level III violation. However, a civil penalty will not be proposed in this case since the violation is now more than six years old, the material false statement did not seem to have affected the Licensing Board's Partial Initial Decision in 1981, and the NSC audit did not identify a significant quality assurance breakdown.

However, the NRC expects licensees to ensure that information relevant and material to the regulatory process be promptly furnished. Licensees and applicants are required to ensure that material information which is capable of influencing a reasonable agency expert in the licensing process is promptly furnished to the Commission. The Commission has noted that "[a]t the hearing stage...where agency decisionmaking is imminent, arguably relevant data must be promptly furnished if the agency is to perform its function." 1/ PG&E should take steps to ensure compliance with this requirement in the future.

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 the attached 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,

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Enclosure:
Notice of Violation

1/ Virginia Electric Power Co. (North Anna Power Station, Units 1 & 2), CLI-76-22, 4 NRC 480, 488 (1976), aff'd sub nom. Virginia Electric & Power Co. v. NRC, 571 F.2d 1289 (4th Cir. 1978).

NOTICE OF VIOLATION

Pacific Gas and Electric Company
Diablo Canyon Nuclear Power Plant Unit No. 1

Docket No. 50-275
License No. DPR-76
EA 84-88

On October 20, 1983, counsel for the Joint Intervenors in the Diablo Canyon operating license proceeding filed a motion before the Commission to revoke the low power license for Unit 1 of the Diablo Canyon Nuclear Power Plant or, alternatively, to continue the suspension of the license. The Joint Intervenors' motion rested on the alleged failure of the Pacific Gas and Electric Company (PG&E or the licensee) to report the existence of a 1977 audit performed by Nuclear Services Corporation (NSC) of the Pullman Power Products (Pullman) quality assurance program. Pullman was the principal piping contractor for the Diablo Canyon Nuclear Project.

The Director of the Office of Inspection and Enforcement denied the petition in a Director's Decision (DD-84-8, 19 NRC 924) dated March 26, 1984. However, he found that the licensee should have reported the results of the NSC audit to the NRC. The Director found the licensee's failure to report the audit to the NRC constituted a material false statement under section 186 of the Atomic Energy Act of 1954, as amended. Intent to mislead or to withhold information is not a prerequisite to the finding of a material false statement under section 186. No intent to mislead was found in this case.

The Commission affirmed the Director's decision to issue a Notice of Violation by Order dated August 20, 1984, and determined that the violation should be categorized at a Severity Level III in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as published on March 8, 1984 (49 FR 8583). The violation is set forth below:

A "full disclosure" doctrine has developed in NRC case law interpreting section 186 of the Atomic Energy Act of 1954, as amended. The Commission has imposed an obligation on licensees and applicants to ensure that relevant and material information which is capable of influencing a reasonable agency expert in the licensing process is promptly furnished to the Commission. The Commission has noted that "[a]t the hearing stage...where agency decisionmaking is imminent, arguably relevant data must be promptly furnished if the agency is to perform its function." 1/

Contrary to the above requirement, PG&E made a material false statement by omission due to its failure in February 1978 to disclose the Nuclear Services Corporation audit at a time when the Licensing Board was attempting to develop a record on quality assurance. The results of the audit revealed apparent significant quality assurance problems which would have prompted the NRC staff to seek further information.

This is a Severity Level III violation.

1/ Virginia Electric Power Co. (North Anna Power Station, Units 1 & 2), CLI-76-22, 4 NRC 480, 488 (1976), aff'd sub nom. Virginia Electric & Power Co. v. NRC, 571 F.2d 1289 (4th Cir. 1978).

Pursuant to the provisions of 10 CFR 2.201, Pacific Gas and Electric Company is hereby required to submit to this office within 30 days of the date of this Notice a written statement or explanation, including: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

FOR THE NUCLEAR REGULATORY COMMISSION

RC DeYoung

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 24th day of September 1984

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

SEP 13 1984

Tennessee Valley Authority
ATTN: Mr. H. G. Parris
Manager of Power and Engineering
500A Chestnut Street Tower II
Chattanooga, TN 37401

Gentlemen:

SUBJECT: SEVERITY LEVEL III VIOLATION (NO CIVIL PENALTY) EA 84-82
VIOLATION RESULTING FROM DESIGN REVIEW DEFICIENCIES
(REFERENCE INSPECTION REPORT NOS. 50-259, 260, AND 296/84-20)

This refers to the routine inspection conducted on April 26 - May 25, 1984 at the Browns Ferry facility of activities authorized by NRC License Nos. DPR-33, DPR-52, and DPR-68. The inspection confirmed four violations related to inadequate design review which had been identified by the licensee. Three were the result of an ongoing review being conducted in compliance with 10 CFR Part 50 Appendix R (fire protection) and one was the result of the normal design review process. An enforcement conference was held with members of your staff on June 21, 1984 during which the violations, their causes and your corrective actions were discussed.

The first violation, item 1.a in the enclosed Notice of Violation, involved the potential inability to meet license requirements for long-term operation (i.e., greater than 10 minutes) during a loss of offsite power coincident with a design basis accident. FSAR Safety Design Basis 3, Section 8.5 specifies that three of the four Unit 1 and 2 diesel generators paralleled with the three corresponding Unit 3 diesel generators shall be adequate to supply the long-term load requirements during this condition. Parallel operation of the diesel generators during this condition would have been inhibited; however, since, as a result of an inadequate original design review, the operational mode switch used to modify the function of the engine governor and the voltage regulator for each diesel generator would only work in "single unit" operation if an accident signal were present. Consequently, sufficient power might not have been available to supply all required loads for safe shutdown of all three units under design basis accident conditions.

The second violation, item 1.b in the enclosed Notice of Violation, concerned shutdown board room ventilation. As a result of an apparent design review inadequacy, the exhaust fans for the shutdown board rooms for Units 1 and 2 would have been permanently shed (de-energized) if a safety injection signal had been present during a loss of offsite power. Also, for some of the shutdown board rooms in Units 1, 2, and 3, both the exhaust fan and the recirculating air conditioning unit for the room were supplied from the same electrical board. As a result, vital safety-related equipment might not have functioned under design basis accident conditions because of possible overheating.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The third violation, item 1.c in the enclosed Notice of Violation, concerned a failure to meet the electrical cable separation criteria specified in FSAR Section 8.9 for the automatic depressurization system (ADS) and the high pressure coolant injection (HPCI) system. As a result, if a fire had occurred in the cable trays carrying the control and power cables to the ADS and HPCI system at the point where proper separation was not maintained, concurrent with the appropriate size small-break loss of coolant accident, adequate cooling for the reactor would not have been available. This violation occurred because of improper review of modifications to safety-related systems.

The fourth violation, item 1.d in the enclosed Notice of Violation, also concerned the ADS valves electrical separation design criteria. The "Plan for Evaluation, Repair and Return to Service of Browns Ferry Units 1 and 2 (March 22, 1975)" dated April 13, 1975 specified that the cables associated with the valves assigned to the automatic depressurization features would be separated from the cables associated with the manual relief valves by rerouting as necessary in separate conduits and cable trays. Adequate separation was never achieved and was later made worse by subsequent modifications to plant systems. As a result, cables associated with the six valves assigned to the automatic depressurization feature shared conduit or cable trays with cables associated with the seven manual relief valves. This violation also occurred because of inadequate design documentation.

The above violations indicate weaknesses in TVA's review of the original design or subsequent modification of safety-related systems. TVA identified each of these violations and either has corrected the problem or has taken compensatory action until final action can be completed.

The NRC is concerned that these examples of inadequate design reviews resulted in operation of the Browns Ferry facility under conditions less conservative than contemplated in the FSAR. The violations have been categorized as a Severity Level III problem in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, and a civil penalty could be proposed. However, the NRC enforcement program recognizes the importance of licensee identification of failures to meet regulatory requirements. Because each of the four examples of inadequate design review in the enclosed Notice of Violation was identified by Tennessee Valley Authority, and in view of the major effort TVA has instituted in the Regulatory Performance Improvement Program, I have determined, after consultation with the Director, Office of Inspection and Enforcement, that a civil penalty should not be proposed for this Severity Level III problem and I have been authorized to issue the enclosed Notice of Violation.

You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. In your response, appropriate reference to previous submittals is acceptable.

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

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

Sincerely,

James P O'Reilly

James P. O'Reilly
Regional Administrator

Enclosures:
1. Notice of Violation
2. Inspection Report Nos. 50-259/84-20, 50-260/84-20, and 50-296/84-20

cc w/encls:
J. A. Coffey, Browns Ferry Nuclear
Plant Site Director
G. T. Jones, Plant Manager
J. W. Anderson, Manager
Office of Quality Assurance
H. N. Culver, Chief, Nuclear Safety Staff
D. L. Williams, Jr., Supervisor
Licensing Section
R. E. Rogers, Project Engineer

NOTICE OF VIOLATION

Tennessee Valley Authority
Browns Ferry Units 1, 2, and 3

Docket Nos. 50-259, 50-260, and 50-296
License Nos. DPR-33, DPR-52, and DPR-68
EA 84-82

As a result of an inspection conducted on April 26 - May 25, 1984, four violations of NRC requirements were confirmed. The underlying cause of these violations appears to be inadequate design reviews. In accordance with the General Statement of Policy and Procedure for Enforcement Actions, 10 CFR Part 2, Appendix C (49 FR 8583 (March 8, 1984)), the particular violations are set forth below:

1. 10 CFR Part 50, Appendix B, Criterion III requires that measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in 10 CFR 50.2 and as specified in the license application, for those structures, systems, and components to which Appendix B applies, are correctly translated into specifications, drawings, procedures, and instructions.

   a. Contrary to the above, this requirement was not met in that if an accident signal had been present, the diesel generators would have been inhibited from working in parallel operation to supply all required loads for the long term (greater than 10 minutes) safe shutdown and cooldown of all three units in the event of loss of off-site power and a design basis accident in any one unit, as called for in the Safety Design Basis (FSAR, Section 8.5).

   b. Contrary to the above, the exhaust fans and recirculating air conditioning units for cooling the shutdown board rooms for Units 1, 2, and 3 were designed such that sufficient support equipment might not have been available to cool the shutdown boards during an accident with a coincident loss of offsite power.

   c. Contrary to the above, the Engineered Safeguard System independence criteria and design basis for electrical cable separation criteria (FSAR, Section 8.9) for the installation of electrical cables for the automatic depressurization system (ADS) and the high pressure coolant injection (HPCI) system were not met.

   d. Facility operating licenses of Units 1 and 2, as amended respectively by Amendment 27 for paragraph 2.C(4) and Amendment 24 for paragraph 2.C(5), permit the facilities to be modified as described in Section X of "Plan for Evaluation, Repair, and Return to Service of Browns Ferry Units 1 and 2 (March 22, 1975)" dated April 13, 1975, and revisions thereto.

"Plan for Evaluation, Repair, and Return to Service of Browns Ferry Units 1 and 2 (March 22, 1975)" dated April 13, 1975, Part X, Section A.3.1.2, as revised, requires that cables associated with valves assigned to the ADS be separated from cables associated with manual relief valves by rerouting as necessary in separate conduits and cable trays.

Contrary to the above, initial modification to achieve the required separation for Units 1 and 2 was inadequate and subsequently made worse by later modifications.

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

Pursuant to the provisions of 10 CFR 2.201, Tennessee Valley Authority is hereby required to submit to this office within thirty days of the date of this Notice, a written statement or explanation in reply, including: (1) the reasons for the violation; (2) the corrective steps which have been taken and the results achieved; (3) corrective steps which will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

Date: SEP 13 1984

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

SEP 21 1984

Tennessee Valley Authority
ATTN: Mr. H. G. Parris
Manager of Power and Engineering
500A Chestnut Street Tower II
Chattanooga, TN 37401

Gentlemen:

SUBJECT: REPORT NOS. 50-259/84-20, 50-260/84-20 AND 50-296/84-20

Due to an administrative oversight, a fifth example in the Notice of Violation forwarded in our letter dated September 13, 1984 was omitted. This fifth example, involving secondary containment integrity at the Browns Ferry facility, is described on page 9 of the inspection report referenced above and forwarded as Enclosure 2 in the September 13, 1984 letter. Also, please note that the Technical Specifications cited in the referenced inspection report were not correct and should be deleted. However, the Notice of Violation with the September 13, 1984 letter correctly referenced regulatory requirement, 10 CFR 50, Appendix B, Criterion III.

Your reply to the Notice of Violation dated September 13, 1984, should address the additional example of noncompliance, which is brought to your attention by this letter. Please contact my staff, if you have questions concerning these corrections.

We regret any inconvenience these errors may have caused you.

Sincerely,

for R. C. Lewis
James P. O'Reilly
Regional Administrator

cc: J. A. Coffey, Browns Ferry
Nuclear Plant Site Director
G. T. Jones, Plant Manager
J. W. Anderson, Manager
Office of Quality Assurance
H. N. Culver, Chief, Nuclear
Safety Staff
D. L. Williams, Jr., Supervisor
Licensing Section
R. E. Rogers, Project Engineer

II.A. MATERIALS LICENSEES, CIVIL PENALTIES AND ORDERS

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

JUN 26 1984

Caribe Shell and Tube, Inc.
ATTN: Mr. M. Planas, President
Firm Delivery
Ponce, Puerto Rico 00731

Gentlemen:

SUBJECT: PROPOSED IMPOSITION OF CIVIL PENALTY: EA 84-56
IMPROPER RADIOGRAPHY SAFETY PROGRAM
(REFERENCE INSPECTION REPORT NO. 52-19438-01/84-10)

This refers to the NRC safety inspection conducted on May 2, 1984 of activities authorized by NRC License No. 52-19438-01. During the inspection, seven examples of failures to comply with NRC requirements were identified. The results of the inspection were discussed on May 18, 1984 during an enforcement conference at your office in Ponce, Puerto Rico between Messrs. C. Pizarro, A. Ramos, and J. Osario of your staff and Mr. K. P. Barr and others of the NRC staff. Additionally, a Confirmation of Action Letter from Mr. James P. O'Reilly, Regional Administrator, NRC Region II, Atlanta, Georgia was sent to you on May 11, 1984 to confirm corrective actions which Caribe Shell and Tube will take to avoid recurrence of similar violations.

The violations are described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty and they collectively represent a breakdown in management oversight and control of your radiation safety program. These violations demonstrate the need for improvement in the administration and control of the program to ensure adherence to NRC requirements and safe performance of licensed activities.

The NRC is concerned that the violations of regulatory requirements could have resulted in unnecessary radiation exposure to licensee employees and members of the public. During the enforcement conference on May 18, 1984, Caribe Shell and Tube stated that one cause of these violations was pressure by the client on the radiographer to complete a previously unplanned job. Another cause of these violations was failure of the radiographer to take those measures required to assure safe operation despite time limitations demanded by the client.

To emphasize the seriousness of these violations and the need to ensure implementation of effective management control over the radiation safety program, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Proposed Imposition of Civil Penalty in the amount of One Thousand Dollars ($1,000) for the violations described in the enclosed Notice. The violations have been categorized as a Severity Level III problem in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C. Although the base civil penalty amount for this type of problem is $5,000, a civil penalty of $1,000 has been proposed because of the small size of the licensee's operation relative to most radiography licensees and because it is not the NRC's intention that the economic impact of the civil penalty be such that it puts a licensee out of business or that the civil penalty interfere with the licensee's ability to safely conduct operations.

You are required to respond to the Notice and you should follow the instructions specified therein when preparing your response. Your response should specifically address the corrective actions planned with regard to ensuring that radiographic operations are conducted strictly in conformance with the applicable requirements, and that adequate management control and oversight is exercised by your radiation safety officer to implement these requirements. In your response, appropriate reference to previous submittals, such as the Confirmation of Action Letter of May 11, 1984, is acceptable.

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

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

Sincerely,

James P O'Reilly

James P. O'Reilly
Regional Administrator

Enclosures:
1. Notice of Violation and Proposed Imposition of Civil Penalty
2. Inspection Report No. 52-19438-01/84-01

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Caribe Shell and Tube, Inc.
Firm Delivery
Ponce, Puerto Rico 00731

License No. 52-19438-01
EA 84-56

An NRC inspection of activities authorized under NRC License No. 52-19438-01 was conducted on May 2, 1984. As a result of this inspection, it appears that there were certain violations of NRC requirements. To emphasize the importance of conducting licensed activities in compliance with NRC regulations, the NRC proposes to impose a civil penalty in the cumulative amount of One Thousand Dollars. Although the base civil penalty amount for this type of problem is $5,000, a civil penalty of $1,000 has been proposed because of the small size of the licensee's operation relative to most radiography licensees and because it is not the NRC's intention that the economic impact of the civil penalty be such that it puts a licensee out of business or that the civil penalty interfere with the licensee's ability to safely conduct operations.

In accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violations and associated civil penalty are set forth below:

1. 10 CFR 34.43(b) requires a licensee to make a survey with a radiation survey instrument after each radiographic exposure to determine that the sealed source has been returned to its shielded position. It requires the licensee to survey the entire circumference of the exposure device and, if the device has a source guide tube, the guide tube as well.

   Contrary to the above, on May 2, 1984, the licensee did not survey after each radiographic exposure to determine that the sealed source in a Tech-Ops 533 camera had been returned to its shielded position during radiographic operations at Hess Oil, Virgin Islands.

2. 10 CFR 34.41 requires a licensee to ensure, during each radiographic operation, that a radiographer or radiographer's assistant maintains direct surveillance of the operation to protect against unauthorized entry into a high radiation area except: (a) where the high radiation area is equipped with a control device or an alarm system as described in 10 CFR 20.203(c)(2) or (b) where the high radiation area is locked to protect against unauthorized or accidental entry.

Contrary to the above, direct surveillance was not maintained by the radiography crew on May 2, 1984, at a field site at Hess Oil, Virgin Islands, because the crew stood behind the truck, out of sight of the radiographic exposure device, when the source was in the exposed position. The high radiation area was not otherwise protected against unauthorized or accidental entry by a control device or an alarm system, nor was it locked.

3. 10 CFR 34.22 requires a licensee, during radiographic operations, to secure the sealed source assembly in its shielded position each time the source is returned to that position.

   Contrary to the above, on May 2, 1984, the licensee, during radiographic operations at Hess Oil, Virgin Islands, did not secure the sealed source assembly in its shielded position after retracting the source to that position.

4. 10 CFR 34.33(a) requires that pocket dosimeters be recharged at the start of each shift.

   Contrary to the above, as of May 2, 1984, some pocket dosimeters had not been recharged since April 30, 1984, although radiographic operations had been conducted each day during that period.

5. License Condition 18 requires that licensed material be used in accordance with statements and procedures contained in the application dated June 12, 1980, as amended July 31, 1980 and June 15, 1981, and the application dated April 21, 1982.

   a. Sections 6.2.1 and 7.1 of the licensee's application of June 12, 1980 require that restricted areas and high radiation areas be posted.

      Contrary to the above, on May 2, 1984, restricted areas and high radiation areas were not posted at a field site at Hess Oil, Virgin Islands where the licensee was conducting radiographic operations.

   b. Section 7.2 of the licensee's application of June 12, 1980 requires that surveys be conducted to establish the restricted area perimeter of restricted areas.

      Contrary to the above, on May 2, 1984, no surveys had been conducted to establish restricted area perimeters at a field site at Hess Oil, Virgin Islands.

c. Section 2.4.1 of the licensee's application dated April 21, 1982, requires that film badges be replaced monthly.

Contrary to the above, licensee employees performing radiography on May 2, 1984 at Hess Oil, Virgin Islands were wearing film badges dated March 25, 1984. These badges should have been exchanged on April 25, 1984.

Collectively, these violations have been evaluated as a Severity Level III problem (Supplement IV and VI).
(Cumulative Civil Penalty - $1,000 assessed equally among the violations.)

Pursuant to the provisions of 10 CFR 2.201, Caribe Shell and Tube, Inc., is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D. C. 20555, with a copy to this office, within 30 days of the date of this Notice a written statement or explanation, 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, the response shall be submitted under oath or affirmation.

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

Upon failure to pay the penalty due, which has subsequently been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalty, unless comprised, 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

ORIGINAL SIGNED BY
JAMES P. O'REILLY

James P. O'Reilly
Regional Administrator

Dated at Atlanta, Georgia
this 26th day of June 1984

CARIBE SHELL AND TUBE, INC.

Telex: 385-3325 CSTINC
Telephones: (809) 836-1340
844-6340

July 23, 1984

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

Ref: Inspection Report No. 52-19438-01/84-10

Dear Sir:

We acknowledge receipt of the letter signed by Mr. James P. O'Reilly, Regional Adminstrator of the Atlanta, Ga. office, dated June 26, 1984 regarding the above referenced report. At the same time we accept that several violations were commited on May 2, 1984, at the Hess Oil Virgin Islands facilities, such as:

1- Failure to survey the exposure device and the guide tube after each radiographic exposure.

We admit this violation happened because of the radiographer's negligence and we have already taken corrective steps as mentioned in our letter dated May 30, 1984.

2- Failure to maintain direct surveillance of the restricted area.

We admit this violation which was due to the fact that the radiographers were working in an open area and there was no restricted area. Corrective steps have been taken as stated in our letter dated May 30, 1984.

3- Failure to secure the sealed source assembly in its shielded position each time the source was returned to that position.

We admit this violation happened because of the radiographer's negligence and corrective action has been taken as stated in our letter of May 30, 1984.

4- Failure to recharge the pocket dosimeters at the start of each shift.

Mailing Address: Firm Delivery - Ponce, Puerto Rico 00731
Office Location: Carr. Est. 183 - P.M. 4.4, Bo. Tallaboa, Penuelas, P. R.

We admit this violation was due to negligence on the radiographer's part and we have taken corrective action as mentioned on our letter dated May 30, 1984.

5- Failure to post restricted areas and high radiation areas. signs.

We admit this violation which was due to the fact that our personnel was sent to work in an open area field where there was no place to put ropes or signs. Corrective steps are discussed in our letter of May 30, 1984.

6- Failure to conduct surveys to establish restricted area perimeter.

We admit this violation which was due to the fact that our personnel was sent to work in an open area field where there were no personnel or edifications within a distance of at least 200 ft. Corrective steps are mentioned in our letter dated May 30, 1984.

7- The film badges worn by our personnel were out of date.

We admit this violation which happened because when we left Puerto Rico to travel to the Virgin Islands our new film badges had not been received from our supplier. Corrective steps are discussed in our letter dated May 30, 1984.

In general terms, the reasons for the violations are that the Inspection Department at Hess Oil was putting too much pressure on our employees. They were also working odd shifts and hours. On this specific instance they had been radiographing some pipeline welds when they were told to stop what they were doing and go work on something else which was supposedly urgently needed. It turned out to be in a completely open area. Our personnel, in order to satisfy the Inspection Department's request for this urgent work, did not take the necessary precautions to do the work.

We strongly agree that this is not enough reason for not doing the job in a safe manner and therefor, accept the penalty imposed by you.

We have found that the corrective actions taken by us, and mentioned in our letter dated May 30, 1984, (copy enclosed) have made our radiographers more responsible and aware of the risks involved when the work is not performed in the proper manner. It is our intention to continue with our safety training courses, more technical training and auditing by our Radiation Safety Officer.

To the best of our knowledge, we have fully completed the corrective actions, and expect these violations will not be repeated again.

Hoping this meets your requirements, we remain,

Sincerely,

Modesto Planas
President

Jesús M. Osorio
Radiation Safety Officer

JMO/esm

enclosure

cc. Mr. James P. O'Reilly
U. S. Nuclear Regulatory Commission
101 Marietta Street, N. W.
Atlanta, Georgia 30303

AFFIDAVIT NO.: 1,951

Sworn and subscribed before me by Mr. Modesto Planas and Mr. [redacted] M. Osorio, of legal age, personally know to me in Peñuelas, Puerto Rico, the 23th. day of July 1984.

JOSEPH BROCCO SANTIAGO
ABOGADO - NOTARIO

Joseph Brocco Santiago
NOTARY PUBLIC

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

July 3, 1984

License No. 12-20297-01
EA 84-62

International Wireline Service
ATTN: Mr. Kenneth Freed, Owner
RR #5, Box 144
Newton, Illinois 62448

Gentlemen:

This refers to the NRC safety inspection conducted on April 18 and 19, 1984, of activities authorized by NRC License No. 12-20297-01. During the Inspection, eight apparent violations of NRC requirements were identified. The results of the inspection were discussed with you at the conclusion of the inspection and on May 11, 1984, during an Enforcement Conference at the NRC Region III office between you and Mr. A. B. Davis and others of the NRC staff.

The apparent violations are described in the attached Notice of Violation and Proposed Imposition of Civil Penalties. Collectively, the violations represent a significant breakdown in management oversight and control of your radiation safety program and demonstrate a need for improvement in the administration and control of the program to ensure adherence to NRC requirements and safe performance of licensed activities.

To emphasize the importance of these matters and the need to ensure implementation of effective management control of your licensed program, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the attached Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Five Hundred Dollars for the violations set forth in the Notice. The violations have been categorized in the aggregate as a Severity Level III problem in accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised 49 FR 8583 (March 8, 1984).

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

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

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

Sincerely,

James G. Keppler
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalties

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

International Wireline Service
Mr. Kenneth Freed, Owner
RR #5, Box 144
Newton, Illinois 62448

License No. 12-20297-01
EA 84-62

An NRC inspection of activities authorized under NRC License No. 12-20297-01 was conducted on April 18 and 19, 1984. During the inspection, eight violations of NRC requirements were identified. Collectively, the violations represent a significant breakdown in management oversight and control of the licensee's radiation safety program. To emphasize the importance of these matters and the need to ensure implementation of effective management control over the radiation safety program, the NRC proposes to impose civil penalties in the cumulative amount of Five Hundred Dollars. In accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violations and the associated civil penalties are set forth below:

A. 10 CFR 71.5 requires that transport of licensed material be made in compliance with Department of Transportation regulations in 49 CFR Parts 170 through 189.

A.1 49 CFR 173.448(a) and 177.842(d) require that packages of radioactive material be so blocked, braced, and secured that they cannot change position during conditions normally incident to transportation.

Contrary to the above, on April 17, 1984, a package containing a three curie Am/Be sealed well-logging radioactive source was not braced or otherwise secured to prevent its loss from the back of a truck during transportation. Consequently, on April 17, 1984 the source fell from the licensee's truck while it was in transit.

A.2 49 CFR 172.200(a) requires that each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper in the manner required by this subpart.

Contrary to the above, no shipping papers were prepared for the transport of a three curie Am/Be source on April 17, 1984.

A.3 49 CFR 172.403(c) requires that each package of radioactive material with a radiation level greater than 50 millirems per hour at the surface and more than 1.0 millirems per hour at one meter from the surface shall be labeled "RADIOACTIVE YELLOW III".

Contrary to the above, on April 17, 1984 a package containing a three curie Am/Be source with radiation levels greater than 50 millirems per hour at the surface and more than 1.0 millrems per hour at one meter from the surface was not labeled "RADIOACTIVE YELLOW III".

B. 10 CFR 20.203(b) requires that each radiation area be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: "CAUTION (or DANGER) - RADIATION AREA." 10 CFR 20.202(b)(2) defines a radiation area as any area, accessible to personnel, in which there exists radiation, originating in whole or in part within licensed material, at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirems, or in any 5 consecutive days a dose in excess of 100 millirems.

Contrary to the above, on April 19, 1984, the licensee's building where well-logging sources were stored, a radiation area with a radiation level of 20 millirems per hour at a half meter from the sources, was not posted.

C. License Condition No. 15 requires that sealed well-logging sources be tested for leakage and/or contamination at intervals not to exceed six months.

Contrary to the above, americium/beryllium and cesium sealed sources have not been leak tested since the license was issued on August 1982.

D. License Condition No. 12 specifically names those individuals who are to be present during the use of licensed material.

Contrary to the above, licensed material has been used without the specified individuals being present since at least October 1983.

E. License Condition No. 18 requires that all licensed material be possessed and used in accordance with statements, representations, and procedures contained in the application dated June 1, 1982 and referenced letters. The application states that the licensee will have a Radiation Safety Officer, who is responsible for the radiation safety program, records maintenance, training, and procedural audits, and that the Radiation Safety Officer will be Mr. Forest Malcolm.

Contrary to the above, since Mr. Malcolm's separation from International Wireline Service in October 1983, the licensee had no Radiation Safety Officer.

F. License Condition No. 18 requires that all licensed material be possessed and used in accordance with statements, representations, and procedures contained in the application dated June 1, 1982 and referenced letters. Attachment B to the application states that sources not in use will be stored inside a locked 10 ft. x 10 ft. fenced enclosure within the facility building.

Contrary to the above, on April 19, 1984, the sources not in use were stored in a 4 ft. x 2 ft. x 2 ft. metal box in a field outside of the facility building.

Collectively, the above violations have been evaluated as a Severity Level III problem (Supplements IV, V, and VI).

(Cumulative Civil Penalties - $500.00 assessed equally among the violations).

Pursuant to the provisions of 10 CFR 2.201, International Wireline Service is hereby required to submit to the Director, Office of Inspection and Enforcement, NRC, Washington, D.C. 20555, with a copy to the Regional Administrator, USNRC, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of this Notice, a written statement or explanation in reply, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps that have been taken and the results achieved; (4) the corrective steps that will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, International Wireline Service may pay the civil penalties in the amount of Five Hundred Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should International Wireline Service 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 International Wireline Service elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer may: (1) deny the violations listed in this Notice, in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties, in whole or in part, such answer may request remission or mitigation of the penalty. In requesting mitigation of the proposed penalties, the five factors contained in Section IV.B of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of International Wireline Service is directed to the other provisions of 10 CFR 2.205 regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalty due, which has been subsequently determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalties, unless compromised,

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

FOR THE NUCLEAR REGULATORY COMMISSION

James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 3rd day of July 1984

INTERNATIONAL WIRELINE SERVICES

R. R. #5 Box 144
Newton, IL 62448
Phone: 618-783-4431

July 18, 1984

DIRECTOR
OFFICE OF INSPECTION AND ENFORCEMENT
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

RE: License #12-20297-01

MR. DIRECTOR:

This is in reference to your letter dated July 3, 1984, regarding the Nuclear Regulatory Commission safety inspection of our facilities in Newton, Illinois of April 18 and 19, 1984. During the inspection eight (8) violations of NRC requirements were found. At the meeting on May 11, 1984 at the NRC Region III office with Mr. Davis and staff, we admitted guilt to the violations, expressed our committment to correct each and every violation. The violations were due mainly to the fact that our previous Radiation Safety Officer did not perform his duties as described in the license and our ignorance as to what was required by the license. All violations have since been corrected and the license ammended accordingly.

We would like to respond to each violation separately as follows:

A. The violation with regards to transporting license material did exist and incidents cited were true. Without a specific person responsible for seeing to the sources storage, an AM/BE source had apparantly been left on the truck and the driver of the truck at the time the source was lost was not aware it was on the truck. For the same reason, no transport papers were filled out. Again, because no one was specifically in charge of the sources, it was not labled on the outside of the package. Since the inspection, all trucks have been welded with platforms for securely bolting and/or locking packages while in transport. All employees have been specifically instructed that sources will always remain in the source house except when leaving for a job and will be returned promptly soon after. They were also instructed on the proper method of filling out transport papers and warned of possible consequences in failure to do so. All shipping packages have since been labled. Our present Radiation Safety Officer has instructed me of storage and transportation of radioactive sources and I conduct periodic spot checks with all drivers, checking lables, papers and securing the sources in the truck.

B. In regards to posting the radiation area, we had simply failed to put signs on the container and have seen to it since that our source house is labled as being a radiation area.

C. In regards to the leak test, again I was not aware that we were required to test the sources. Since the inspection, all sources have been leak tested and a schedule has been set up so that all sources will remain current. In order to assure that the sources are tested, we are implementing a new inventory form stating the date that the leak test is due again, so that when monthly inventories are taken the sources needing tested can be swabbed.

D. The specified users of the radiation sources indicated on our license were myself and Forest Malcom. In October when Mr. Malcom quit, I was the only authorized user and apparently was not qualified. Since the inspection, my name has been deleted as a user and Mr. Cantrell's name added. Until we can add other names as users, Mr. Cantrell is supervising every job using a sealed source. We have had two other employees who have attended Radiation Safety school since the inspection, and hope to add them soon as users.

E. I was not aware that we were in violation of not having a safety officer when Mr. Malcom left the company in October of 1983. You brought this to my attention at our meeting and we ammended our license accordingly to place Donald Cantrell as our Radiation Safety Officer. In the event of Mr. Cantrell's seperation from the company, we would immediately find a qualified replacement and ammend the license accordingly.

F. Contrary to the license requirement of a locked 10' x 10' building inside the garage, the sources were being stored in a metal box secured to some large telephone poles outside the building but inside the fenced-in security area. Since then, we have ammended our license to allow storage in a steel shed outside the building within our fenced-in grounds. The shed is locked at all times, except when sources are being taken out or put in and is within requirements of the ammendment recently filed.

We hope that the above information is complete and useful. If there are any other questions or any other information needed before we bring this matter to a close, please contact us. A check for $500.00, the amount of a civil penalty, is enclosed. Thank-you.

Sincerely,

KENNETH R. FREED

KRF/pec
cc: Regional Administrator
USNRC - Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

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

AUG 2 0 1984

License No. 12-07165-01
EA-84-74

Kraft, Incorporated
ATTN: Mr. David Holcomb
Manager, Basic Food
Service
801 Waukegan Road
Glenview, IL 60025

Gentlemen:

This refers to the NRC safety inspection conducted on June 5 through July 9, 1984, of activities authorized by NRC License No. 12-07165-01. During the inspection, four apparent violations of NRC requirements were identified against License No. 12-07165-01, and one violation was identified against a general license. The results of the inspection were discussed with you at the conclusion of the inspection and on June 26, 1984, during an enforcement conference at the NRC Region III office between you and Mr. A. B. Davis and others of the NRC staff.

The apparent violations are described in the attached Notice of Violation and Proposed Imposition of Civil Penalties. Collectively, the violations represent a significant breakdown in management oversight and control of your radiation safety program and demonstrate a need for improvement in the administration and control of the program to ensure adherence to NRC requirements and safe performance of licensed activities.

To emphasize the importance of these matters and the need to ensure implementation of effective management control of your licensed program, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the attached Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Five Hundred Dollars for the violations set forth in the Notice. The violations have been categorized in the aggregate as a Severity Level III problem in accordance with the NRC Enforcement Policy and 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984).

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

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

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The responses directed by this letter and the 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,

A Bert Davis

for James G. Keppler
Regional Administrator

Enclosure: Notice of
Violation and Proposed
Imposition of Civil
Penalties

Distribution
PDR
SECY
CA
RCDeYoung, IE
JTaylor, IE
DGrimsley, IE
JLieberman, ELD
JKeppler,RIII
Enforcement Coordinators
RI, RII, RIII, RIV, RV
FIngram, PA
VStello, DED/ROGR
JCrooks, AEOD
B. Hayes, OI
GMessenger, OIA
LCobb, IE
VMiller, NMSS
DNussbaumer, OSP
IE:ES File
IE:EA File
EDO Rdg File
DCS

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Kraft, Incorporated
801 Waukegan Road
Glenview, IL 60025

License No. 12-07165-01
General License

An NRC inspection of activities authorized under NRC License No. 12-07165-01 was conducted on June 5 through July 9, 1984. During the inspection, four violations of NRC requirements were identified against License No. 12-07165-01, and one violation was identified against a general license. Collectively, the violations represent a significant breakdown in management oversight and control of the licensee's radiation safety program.

To emphasize the importance of these matters and the need to ensure implementation of effective management control over the radiation safety program, the NRC proposes to impose cumulative civil penalties in the amount of Five Hundred Dollars. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violations and the associated civil penalties are set forth below:

I. License No. 12-07165-01

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

10 CFR 20.3(a)(17) defines unrestricted area as any area access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above, licensed material, consisting of a 450 millicurie cesium-137 sealed source contained in a density gauge that was stored in an unrestricted area in a Skokie, Illinois warehouse, was removed from storage in late 1981 or early 1982 by an unauthorized individual or individuals.

B. License Condition No. 10 states that licensed material shall be used only at the Kraft Research Facility, 801 Waukegan Road, Glenview, Illinois.

Contrary to the above, licensed material was used (stored) at a location not authorized in the NRC license. Specifically, a nominal 450 millicurie cesium-137 sealed source contained in a density gauge was stored at a commercial storage warehouse in Skokie, Illinois from 1975 until it was sold in 1981.

C. License Condition No. 16 requires that all licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated February 8, 1979 and April 3, 1979.

The April 3, 1979 application states that the licensee's established Radiation Safety (Isotopes) Committee has jurisdiction over the use of radioactive materials or sources of ionizing radiation, and that final approval of all proposed uses, procurement, individual users, work areas, and procedures involving radioactive materials rests with the Committee.

Contrary to the above, as of the date of the inspection, an individual had procured and used radioactive materials for the past several years without approvel of the Radiation Safety Committee.

D. License Condition No. 16 requires that all licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated February 8, 1979 and April 3, 1979.

The February 8, 1979 application states that (a) all areas involved in work with radioactive materials will be monitored routinely and supervised by the Radiation Protection Officer, and (b) the Radiation Protection Officer shall monitor all working areas on a periodic basis when there is an active program involving isotopes and/or radioactive materials and assure that all operations involving radioactivity are monitored properly.

Contrary to the above, as of the date of the inspection, laboratory areas involved in work with radioactive material had not been monitored by the Radiation Protection Officer for the past several years.

Collectively, the above four violations have been evaluated as a Severity Level III problem (Supplements IV and VI).

(Cumulative Civil Penalties - $500 assessed equally among the violations).

II. General License

E. 10 CFR 31.5(c)(2) requires that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to 10 CFR 31.5(a) shall assure that the device is tested for leakage of radioactive material at no longer than six-month intervals or at such other intervals as are specified in the label. Sealed sources are required to be leak tested at six-month intervals.

Contrary to the above, four nickel-63 sealed sources contained in gas chromatographs have not been leak tested at six month intervals. The sources have not been tested since their receipt several years ago.

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

Pursuant to the provisions of 10 CFR 2.201, Kraft, Incorporated is hereby required to submit to the Director, Office of Inspection and Enforcement, NRC, Washington, D.C. 20555, with a copy to the Regional Administrator, USNRC, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of this Notice, a written statement or explanation in reply, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps that have been taken and the results achieved; (4) the corrective steps that will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

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

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

FOR THE NUCLEAR REGULATORY COMMISSION

A Bert Davis

for James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 27 day of August 1984

Kraft
INC

John F. White
Vice President
and Director of
Research and Development

September 17, 1984

Director
Office of Inspection and Enforcement
NRC
Washington, D.C. 20555

Dear Sir:

Enclosed is the Kraft, Inc. response to the previously issued Notice of Violation sent to our attention August 28, 1984. Also enclosed is our draft in the amount of five hundred dollars in payment of the proposed civil penalty.

Very truly yours,

John F. White

JFW:cm

cc: Regional Administrator
USNRC, Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

REPLY TO NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

In Re: Kraft, Incorporated
801 Waukegan Road
Glenview, IL 60025

License No. 12-07165-01
General License

Now comes Kraft and for its reply to the notice of violation and proposed imposition of civil penalties says as follows:

I. License No. 12-07165-01

A. Kraft admits that licensed material was stored in an unrestricted area and was not secured from unauthorized removal. The reasons that this event occurred were: a lack of understanding of the regulations; and a breakdown in control of radiation sources. Remedial action has been taken concerning understanding of regulatory requirements and license conditions and appropriate controls have been instituted so that licensed sources are not removed from the premises or stored in unrestricted areas. The above actions were started shortly after the first inspection and an outside consultant was retained to review and comment on appropriate procedures to assure full compliance with regulatory requirements.

B. Kraft admits that licensed material was stored at a location not authorized in the NRC license. The reason that this occurred was a lack of understanding of regulatory requirements imposed by the license. Remedial action was taken shortly after the inspection in that all licensed sources were identified and leak tested in July, 1984, their locations logged, a quarterly inventory program was initiated and a biannual leak test program was instituted to insure the integrity of all licensed material.

C. Kraft admits that an individual procured and used radioactive material without approval of the Radiation Safety Committee. The reason that this occurred was a breakdown in the committees procedures. Remedial action was taken shortly after the inspection in that the radiation safety committee was reconstituted and the procedures concerning inventory and leak testing and locations of licensed materials were reviewed along with regulatory requirements for licensed materials. Additional procedures were instituted to insure that all purchases of radioactive material must be approved by the Radiation Safety Committee or the Radiation Protection Officer.

D. Kraft admits that areas involved in work with radioactive material had not been monitored by the Radiation Protection

Officer. The reason this occurred was the Radiation Protection Officer's lack of understanding of regulatory requirements. Remedial action was taken shortly after the inspection so that the Radiation Safety Committee established monthly monitoring procedures for areas involved in work with radioactive materials and monitoring results are reviewed by the Radiation Safety Committee.

II. General License

E. Kraft admits that the gas chromatographs had not been leak tested at six-month intervals. The reason this occurred was that the Radiation Protection Officer was unaware of regulatory requirements. Remedial action was taken shortly after the inspection in that routine leak testing would be instituted. In July, of 1984, the gas chromatographs were leak tested and found to be free of detectable radioactivity.

In addition to the specific corrective measures that have been taken, as outlined above, we have proposed the substitution of a different person as our Radiation Protection Officer. We have reconstituted the radiation safety committee to include the principle managers of areas where licensed materials are used. We have conducted radiation safety training; have instituted greater management controls over the procurement use and disposal of licensed materials; have improved our monitoring and testing of licensed materials and have instituted measures which we believe will prevent a reoccurrence of the situations referred to in the Notice of Violation.

We include our draft in the amount of five hundred dollars ($500) in payment of the proposed civil penalty.

Respectively submitted,

John F. White

John F. White
Vice President and
Director, Research and
Development

State of Illinois)
) SS
County of Cook)

J. F. White, being first duly sworn, under oath states that he is Vice President and Director of Research and Development of Kraft, Incorporated; that the foregoing information contained in this reply was prepared by personnel under his supervision; that he is familiar with the contents; and that the facts set forth therein are true to the best of his knowledge, information and belief.

John F. White

Subscribed and sworn to this 14th day of September, 1984

Notary Public

MY COMMISSION EXPIRES APRIL 7, 1987.

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

JUL 19 1984

License No. 12-19985-01
EA 84-61

Mid-States Logging and
Perforating Co.
ATTN: Donald A. Gherardini
Manager
Route 45 North, Box 39
Fairfield, IL 62837

Gentlemen:

This refers to the NRC routine safety inspection conducted by Mr. D. R. Gibbons of this office on April 30 through May 2, 1984 of activities authorized by NRC License No. 12-19985-01. During the inspection, numerous violations of NRC requirements were identified The results of the inspection were discussed with you at the conclusion of the inspection, and on May 18, 1984, during the enforcement conference at the NRC Region III office between you and members of your staff and Mr. A. B. Davis and others of the NRC staff.

The apparent violations are described in the attached Notice of Violation and Proposed Imposition of Civil Penalties. Collectively they represent a breakdown in management oversight and control of your radiation safety program and demonstrate a clear need for improvement in the administration and control of the program to ensure adherence to NRC requirements and safe performance of licensed activities.

To emphasize the importance of these matters and the need to ensure implementation of effective management control of your licensed program, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the attached Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Five Hundred Dollars for the violations set forth in the Notice. The violations have been categorized in the aggregate as a Severity Level III problem in accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984).

This inspection identified a possible theft of licensed material which has been referred to our Office of Investigations for investigation. Appropriate enforcement action regarding the findings of the investigation will be taken at its conclusion. You will be notified of the results of this review.

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

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

The responses directed by this letter and the accompanying report 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

James G. Keppler
Regional Administrator

Enclosure: Notice of Violation
and Proposed Imposition
of Civil Penalties

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Mid-States Logging and
Perforating Co.
Route 45 North, Box 39
Fairfield, IL 62837

License No. 12-19985-01
EA 84-61

An NRC inspection of activities authorized under NRC License No. 12-19985-01 was conducted on April 30 through May 2, 1984. During the inspection, multiple instances of failures to comply with NRC requirements were identified. Collectively, they represent a breakdown in the management oversight and control of the licensee's radiation safety program.

To emphasize the importance of these matters and the need to ensure implementation of effective management control over the radiation safety program, the NRC proposes to impose civil penalties in the cumulative amount of Five Hundred Dollars. In accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violations and the associated civil penalties are set forth below:

A. License Condition No. 10 limits the use of byproduct material to 1013 N. Main Street, Olney, Illinois, and at temporary job sites anywhere in the United States where the U. S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.

Contrary to this requirement, licensed material was used and stored at Route 45 North, Fairfield, Illinois, since August 1, 1982, a location not authorized by the license.

B. License Condition No. 12 requires that licensed material be used under the supervision and in the physical presence of certain named individuals.

Contrary to this requirement, licensed material was used on numerous occasions during the period from 1982 to 1983 by individuals not named on the license and such use was not under the supervision of or in the physical presence of individuals named under the license.

C. License Condition No. 15 requires a physical inventory every six (6) months to account for all sealed sources possessed and used under the license.

Contrary to this requirement, the licensee failed to conduct physical inventories during the period from November 2, 1982 to April 13, 1984, a period exceeding six (6) months.

D. License Condition No. 18 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981 with enclosures thereto. Appendix B, Section I(a)(1)(2) of the Storage, Operating and Emergency Procedures Manual submitted as part of the applications dated December 15, 1981 and April 25, 1982, states that licensed material will be stored in storage pits (downhole), or in a steel bunker with a locking device.

Contrary to this requirement, licensed material has been stored on a wooden pallet, above ground, and with no locking device since August 2, 1982.

E. 10 CFR 20.203(b) requires that each radiation area be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: "Caution (or Danger)-Radiation Area." 10 CFR 20.202(b)(2) defines a radiation area as any area, accessible to personnel, in which there exists radiation, originating in whole or in part within licensed material, at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirems, or in any 5 consecutive days, a dose in excess of 100 millirems. Appendix B, Section I(a)(3) in the licensee's Operating Manual requires the above signs on or around storage areas. In addition, that section of the Manual requires signs bearing the words: "Caution Radioactive Materials" to be posted on storage areas.

Contrary to this requirement, during the period April 30 through May 2, 1984, a container with 2 curies of cesium-137 was stored on a wooden pallet inside the licensee's warehouse with radiation levels of 6 millirem per hour at the perimeter of the pallet and the licensee did not post signs labeled "Caution (or Danger)-Radiation Area" or "Caution Radioactive Materials."

F. License Condition No. 18 requires licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981. The application dated July 11, 1982 names a certain individual as the Radiation Safety Officer.

Contrary to this requirement, the licensee has operated without any radiation safety officer since July 7, 1983, the day the authorized Radiation Safety Officer terminated employment.

G. 10 CFR 30.51(a) requires that each licensee keep records showing the receipt, transfer, and disposal of licensed material.

Contrary to this requirement, the licensee failed to maintain receipt records of two sealed sources purchased in December 1982 and February 1984.

H. 10 CFR 71.5(a) requires that no licensee shall transport any licensed material outside of the confines of its 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.

49 CFR 172.200(a) requires each person who offers a hazardous material for transportation to describe the hazardous material on the shipping paper in the manner required by this subpart.

Contrary to this requirement, the licensee transported hazardous material (radioactive) from its facility to temporary job sites during the period from August 27, 1983 to January 14, 1984 without proper shipping papers.

I. License Condition No. 18 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981. Appendix A, Section VI(e)(f) of the Storage, Operating and Emergency Procedure Manual submitted with the applications dated December 15, 1981 and July 11, 1982 requires monthly surveys of licensee vehicles and quarterly surveys of the storage areas.

Contrary to this requirement, the licensee failed to perform monthly vehicle surveys, and failed to perform quarterly surveys of the storage areas since August 27, 1983.

J. License Condition No. 18 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated April 25, 1982, July 11, 1982, and December 15, 1981. Appendix B, Section III of the Storage, Operating and Emergency Procedures Manual submitted as part of the applications dated December 15, 1981 and July 11, 1982 requires job log sheets be maintained for each time licensed material is used at temporary job sites.

Contrary to this requirement, job log sheets were not maintained for the period from August 27, 1983 through May 2, 1984.

Collectively, the above violations have been evaluated as a Severity Level III problem (Supplements IV, V, and VI).

(Cumulative Civil Penalties - $500 assessed equally among the violations).

Pursuant to the provisions of 10 CFR 2.201, Mid-States Logging and Perforating Co. is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, DC 20555, with a copy to the Regional Administrator, USNRC, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of this Notice, a written statement or explanation in reply, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps that will be taken and the results achieved; (4) the corrective steps that will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Mid-States Logging and Perforating Co. may pay the civil penalties in the amount of Five Hundred Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should Mid-States Logging and Perforating Co. 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 Mid-States Logging and Perforating Co. 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 V.B of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of Mid-States Logging and Perforating Co. is directed to the other provisions of 10 CFR 2.205 regarding the procedure for imposing a civil penalty.

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

FOR THE NUCLEAR REGULATORY COMMISSION

James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 10th day of July 1984

MID-STATES

July 18, 1984

Director, Office of Inspection and Enforcement
USNRC
Washington, DC 20555

Gentlemen:

In accordance with requirement of response to NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES, Mid-States hereby agrees that prior to corporate restructure and management reorganization, the radiation management and safety program was but vaguely adhered to. Mid-States agrees to pay the civil penalties levied in the amount of five hundred dollars and acknowledges that we do indeed understand the importance of this matter as we feel we have plainly demonstrated by our cooperation and assistance to the commission in its investigation.

In reference to the particular violations associated with this penalty as listed in the notice:

VIOLATION A. LICENSE CONDITION NO. 10

1. Mid-States agrees that condition was violated
2. Mid-States believes former manager responsible for this apparently intentional violation, as represented by falsified license posted and submitted to the commission at Enforcement Board Meeting.
3. Mid-States applied for and was granted amendment to condition No. 10.
4. Mid-States has reorganized its corporate structure as to disassociate itself with former manager Carl Hubbartt and his father, former President and Partner, Max Hubbartt and has employed new management and staff.
5. Full compliance was achieved June 14, 1984.

VIOLATION B CONDITION NO. 12

1. Mid-States agrees that condition No. 12 was violated
2. Mid-States believes former manager responsible as in any company, the manager decides who performs the jobs
3. Mid-States applied for and was granted amendment to condition #12.

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cont. -2-

4. Mid-States has employed new management and staff
5. Full compliance was achieved June 14, 1984.

VIOLATION C. CONDITION NO. 15

1. Mid-States agrees that condition No. 15 was violated.
2. Mid-States believes that, due to incompetent management practice during this period of time, proper inventories were not kept.
3. Mid-States ownership organization implementing strict inventory controls and procedures.
4. Mid-States employed new management and staff.
5. Full compliance was achieved on or immediately after inspection on April 30 thru May 2 when responsibility of additional source was verified and said source recovered.

VIOLATION D. CONDITION NO. 18

1. Mid-States agrees that condition No. 18 was violated.
2. Mid-States believes that due to incompetent management practice during this time , proper storage facilities were never achieved.
3. Implementation of a locked shielded controlled access room, for source storage was achieved before inspector left on May 2, and amendments applied for and granted by the commission
4. Close observation of storage procedure by the new management and staff.
5. Full compliance was achieved on June 14, 1984.

VIOLATION E. 10 CFR 20.203 (b)

1. Mid-States agrees 10CFR 20.203 (b) was violated.
2. Mid-States believes that incompetent management practices are responsible for the violation.
3. Mid-States now stores all sources inside a locked, shielded, controlled access room, posted according to our operating manual.
4. Mid-States has employed new management and staff.
5. Full compliance was achieved before inspector left Mid-States on May 2.

VIOLATION F. LICENSE CONDITION 18.

1. Mid-States agrees license condition 18 was violated.
2. Mid-States believes former manager responsible for violation because he fired Radiation Safety Officer and neglected to

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ammend license or even replace the Radiation Safety Officer.
3. Mid-States has applied for and has been granted by the commission ammendments to license.
4. Mid-States has employed new management and staff.
5. Full compliance was achieved on June 14, 1984.

VIOLATION G. 10CFR 30.51 (a)

1. Mid-States agrees that CFR 30.51 (a) was violated .
2. Mid-States believes that former manager stole source and documentation for said source, for it was not on any inventory record. Furthermore, if not for diligent efforts by inspector Don Gibbons, disposition of said source and any documentation might not be known today.
3. Mid-States has contacted manufacturer of said source and requested and received copies of documentation.
4. Mid-States has seperated itself from former management and employed a new manager and staff.

VIOLATION H. 10CFR 71.5(a)

1. Mid-States agrees that 10 CFR 71.5(a) was violated.
2. Mid-States beleives former management responsible in that testimony by field employees to the fact that they were instructed by the manager not to fill out any more DOT utilization logs.
3. Mid-States has employed qualified field personnel and instructed them accordingly.
4. Mid-States has employed a new manager and staff.
5. Full compliance was achieved June 14, 1984.

VIOLATION I. LICENSE CONDITION 18.

1. Mid-States agrees that license condition 18 was violated.
2. Mid-States holds former manager responsible for violation in that testimony by field personnel that they were instructed by the manager himself not to perform such surveys which previously were the duty of the Radiation Safety Officer, whom the manager terminated in July, 1983, and that he himself would perform such surveys.
3. Mid-States has employed Radiation Safety Officers and instructed them accordingly.
4. Mid-States has employed a new manager and staff.
5. Full compliance was achieved June 14,1984.

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cont. -4-

VIOLATION J. LICENSE CONDITION 18

1. Mid-States agrees that license condition 18 was violated.
2. Mid-States believes former manager responsible in that testimony by field personnel that they were instructed by the manager himself not to maintain job log sheets after the manager fired the Radiation Safety Officer.
3. All of Mid-States' present staff has been instructed in the guidelines set forth in Appendix B, Section III of the operating manual.
4. Mid-States has employed a new manager and staff.
5. Full compliance was achieved on June 14, 1984.

Mid-States asks that the commission consider in its decision, the fact that the owners, A.J. and L.D. Pitcher were, prior to April, partners with Max Hubbartt, father of former manager, Carl Hubbartt, and that they had suspicions that since August, 1983, the company was in need of new management. Their decision to buy out their partner, Max Hubbartt, also at that time President of the corporation, and then install new management or controls, seemed to them the best avenue of reorganization.

The corporate restructure took place the first week of April and it wasn't until after the inspection on April 30th and resulting investigation into the records and files did they fully understand the extent of the mismanagement.

Furthermore, Mid-States strongly urges that the unresolved item of the stolen source, and who was responsible for this theft and the theft of documentation pertaining to said source, as well as logging tools, explosives, and miscellaneous equipment needed for operating a well logging business be investigated immediately, for due to the time already lapsed, Mid-States has suffered unfair publicity.

cont.

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Mid-States also believes that due to the issuance of a materials license to the persons responsible for the gross mismanagement of our radiation program, as well as the theft of a source, that when all is resolved, it will be extremely embarrassing to anyone associated with this matter.

I hereby swear that, to the best of my knowledge, the above is true representation of the facts.

signed Donald A Gherardini

Donald A. Gherardini, manager
Mid-States Logging and Perforating Co.

Reviewed and approved by:

A.J. Pitcher, President A J Pitcher

Witnessed by:

1. [illegible]
2. [illegible]

Route 45 N • Box 39 • Fairfield, Il 62837 • Phone 618-842-9156

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

APR 05 1984

Prillaman & Pace, Inc.
ATTN: Mr. Richard Prillaman
President
P. O. Box 4667
Martinsville, VA 24112

Gentlemen:

SUBJECT: PROPOSED IMPOSITION OF CIVIL PENALTIES: EA 84-19
CONDUCT OF ACTIVITIES BY TECHNICALLY UNQUALIFIED PERSON
(REFERENCE: INSPECTION REPORT NO. 45-18492-01/84-01)

On January 18, 1984, the NRC conducted an inspection of activities authorized by NRC License No. 45-18492-01. At the conclusion of the inspection, the findings were discussed with Mr. Dick Prillaman, Acting Radiation Safety Officer. The NRC's concerns relative to the inspection findings were discussed by Mr. J. Philip Stohr, Director, Division of Emergency Preparedness and Materials Safety Programs of this office and Mr. Richard Prillaman, President, Prillaman & Pace, Inc., in an Enforcement Conference held at Mr. Prillaman's office on February 14, 1984.

The inspection revealed several violations, all of which may be attributed to inadequate management of the licensed program by persons who were unfamiliar with NRC requirements and the provisions of the NRC license. Of the resultant violations, the NRC is most concerned with the failure by the licensee to evaluate the October 1980 reported exposure of 4680 millirems to the film badge assigned to the user of a moisture density gauge containing 10 millicuries of cesium-137 and 50 millicuries of americium-241. The licensee is currently engaged in investigating the incident; however, the NRC expects a licensee to take prompt and effective investigative action when an employee has or may have been subject to an excessive exposure to radiation.

To emphasize the need for Prillaman & Pace, Inc., to ensure implementation of qualified management control of its licensed program, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violations and Proposed Imposition of Civil Penalties in the amount of One Thousand Dollars for the violations set forth in the Notice. The violations have been categorized in the aggregate as a Severity Level III problem pursuant to the General Statement of Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C. Under the Enforcement Policy, the base civil penalty for a Severity Level III problem is Five Hundred Dollars. We have concluded that civil penalties of One Thousand Dollars is appropriate in this matter due to the number of violations involved which demonstrate a lack of management control over licensed activities and serious inattention to NRC requirements.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

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

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

Sincerely,

Robert D. Martin for
James P. O'Reilly
Regional Administrator

Enclosure:
Notice of Violations and Proposed
Imposition of Civil Penalties

NOTICE OF VIOLATIONS

AND

PROPOSED IMPOSITION OF CIVIL PENALTIES

Prillaman & Pace, Inc.
P. O. Box 4667
Martinsville, Virginia 24112

License No. 45-18492-01
EA 84-19

An NRC inspection of activities authorized under NRC License No. 45-18492-01 was conducted on January 18, 1984. The inspection disclosed six violations of regulatory requirements resulting from inadequate management of the licensed activities by individuals who were unaware of NRC requirements and the provisions of the license. The NRC is most concerned with the failure to investigate the circumstances surrounding a report showing 4680 millirems exposure to a film badge assigned to an employee who handled 10 millicuries of cesium-137 and 50 millicuries of americium-241 during October 1980.

To emphasize the need to ensure effective management control of the licensed program, the NRC proposes to impose civil penalties of One Thousand Dollars. Although the base civil penalty for a Severity Level III violation is Five Hundred Dollars, civil penalties of One Thousand Dollars are proposed in this matter due to the number of violations involved which demonstrate a lack of management control over licensed activities and serious inattention to NRC requirements. In accordance with the General Policy and Procedure for NRC Enforcement Actions (10 CFR Part 2, Appendix C) and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violations and associated civil penalties are set forth below:

1. License Condition 17 requires the licensee to possess and use its licensed material in accordance with statements contained in the license application dated April 6, 1979. Item 7 of the license application states that the licensee has a radiation protection officer and identifies the radiation protection officer by name.

   Contrary to the above, since 1980, the named radiation protection officer had not been in the licensee's employ and no amendment of the license was sought by the licensee. Consequently, the licensee was without a radiation safety officer during th[illegible] time.

2. 10 CFR 20.201(b) requires the licensee to make such surveys as: (1) may be necessary for the licensee to comply with the regulations in 10 CFR Part 20, and (2) are reasonable under the circumstances to evaluate the extent of the radiation hazards that may be present. A "survey" is defined in 10 CFR 20.201(a) as an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions.

   Contrary to the above, the licensee failed in October 1980 to evaluate a film badge reading of 4680 millirems to determine if the worker to whom the badge was assigned had received an exposure in excess of limits specified in 10 CFR 20.101.

3. License Condition 13 requires the licensee to test each sealed source containing licensed material for leakage or contamination at intervals not to exceed six months.

   Contrary to the above, between July 1982 and January 1984, a period of 19 months, the licensee did not test its cesium-137 and americium-241 sealed sources for leakage or contamination.

4. 10 CFR 20.203(e) requires a licensee to post each area or room in which licensed material is used or stored and which contains any radioactive material (other than natural uranium or thorium) in an amount exceeding 10 times the quantity of such material specified in Appendix C of 10 CFR 20, with a conspicuous sign or signs bearing the radiation caution symbol and the words: "Caution Radioactive Material," unless excepted under 10 CFR 20.204.

   Contrary to the above, on January 18, 1984, the licensee had not posted the room in which a gauge containing 10 millicuries of cesium-137 and 50 millicuries of americium-241 was stored. Ten times the quantity of cesium-137 specified in Appendix C of 10 CFR Part 20 is 0.1 millicurie; for americium-241 it is 0.0001 millicurie. The radiation level at 12 inches from the source container was greater than 5 millirems per hour, a level not excepted by 10 CFR 20.204.

5. 10 CFR 19.11 requires a licensee to post current copies of 10 CFR Parts 19 and 20 and its NRC license in a sufficient number of places to permit individuals engaged in licensed activities to observe them on the way to or from the licensed activity area to which the documents apply. If posting the documents is not practicable, the licensee may post a notice which describes the documents and states where they may be examined. It also requires posting of Form NRC-3, "Notice to Employees."

   Contrary to the above, on January 18, 1984, the licensee had not posted the current copies of 10 CFR Parts 19 and 20 and its NRC license or a notice describing the documents and stating where they might be examined, nor had the licensee posted a Form NRC-3.

6. 10 CFR 71.5(a) requires a licensee who transports licensed material outside the confines of his plant to comply with the Department of Transportation regulations appropriate to the mode of transport as provided in 49 CFR Parts 170-189.

   49 CFR 172.200(a) requires each shipper of hazardous material to describe the material in shipping papers which accompany the shipment.

   Contrary to the above, the licensee transported its gauge, containing hazardous material, to several job sites in a company truck unaccompanied by shipping papers.

7. 10 CFR 20.401(a) requires a licensee to maintain records showing radiation exposure to individuals for whom personnel monitoring is required under 10 CFR 20.202.

   Contrary to the above, records showing radiation exposure to an employee, who used the licensed gauge and was required to use personnel monitoring, were not maintained for each month in which the gauge was used.

   Collectively, the violations have been evaluated as a Severity Level III problem (Supplements IV and VI).

   (Cumulative Civil Penalties of $1,000 assessed equally among the violations.)

Pursuant to 10 CFR 2.201, Prillaman & Pace, Inc., is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, D. C. 20555, with a copy to this office, within 30 days of the date of this Notice a written statement or explanation, including for each alleged violation: (1) admission or denial of the alleged violations; (2) the reasons for the violations if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, the response shall be submitted under oath or affirmation.

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

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

FOR THE NUCLEAR REGULATORY COMMISSION

Robert D. Martin for
James P. O'Reilly
Regional Administrator

Dated at Atlanta, Georgia
This 5th day of April 1984

Prillaman & Pace, Inc.
MECHANICAL • SHEETMETAL • PIPELINE
830 Brookdale Road Phone 703-632-6308 P. O. Drawer 4667 Martinsville, Virginia 24112

April 26, 1984

Director
Office of Inspection and Enforcement
U S N R C
Washington, DC 20555

REFERENCE: License No. 45-18492-01
Proposed Civil Penalty

Gentlemen:

I would like to protest the imposition of the proposed civil penalty for Prillaman & Pace, Inc. on the grounds that we had not been properly informed by the former officer of the corporation who looked after the purchasing and operating of the equipment. He left the corporation on December 31, 1980 and since we knew that we had a certified operator we made the mistake of thinking we were meeting the regulations.

The inspection by the NRC on January 18, 1984 was the first since we have had the equipment and since then we have corrected all the violations, and have not used the equipment since. We would ask that the imposition of the fine not be enforced and that we would be allowed to start using the equipment again. After that we would welcome another inspection and if they found enough violation at that time we would accept a penalty.

Respectfully submitted,

PRILLAMAN & PACE, INC.

Richard A. Prillaman

Richard A. Prillaman
President

cc: Mr James P. O'Reilly
Regional Administrator

national environmental systems contractors association

1954 PRILLAMAN & PACE, INC. 30 Years of Service MARTINSVILLE, VIRGINIA 1984

Prillaman & Pace, Inc.
MECHANICAL • SHEETMETAL • PIPELINE
830 Brookdale Road
Phone 703-632-6308
P. O. Drawer 4667
Martinsville, Virginia 24112

April 26, 1984

84-19

Director
Office of Inspection and Enforcement
U S N R C
Washington, DC 20555

REFERENCE: License No. 45-18492-01
Inspection January 18, 1984

Gentlemen:

On January 18, 1984 we were inspected by an NRC inspector and cited for six violations. We immediately corrected some of the things, and the others as soon as possible. Our former RSO Officer left our employment in 1981 and did not inform us of some of the things we needed to do. We wrongly assumed nat since we had a certified operator that we were meeting the regulations. Since this inspection we have had two other people certified, one of which is Richard A. Prillaman, Jr., who is a stockholder and officer of the corporation. He is now our certified RSO Officer.

As to the over exposure in 1980 we enclose a statement from our operator that he stored his badge with the equipment in 1980 and 1981. We think the things explained so far should make us in compliance with Violations 1 and 2.

3. We have had the equipment leak tested March 1, 1984 and will continue to have it leak tested every six months.

4. Immediately after the inspection a sign "Caution Radioactive Materials" was posted on the room where the equipment is stored.

5. The "Notice to Employees" and license were posted on the room immediately after inspection.

6. Since the inspection, the only time the equipment was out of the storage room was to transport it for leak testing. The shipping papers were carried with it and we will continue to have the papers with the equipment when it is moved.

7. Richard A. Prillaman, Jr. is now our RSO Officer and I personally will see that he maintains the proper exposure records and etc.

We have had this equipment since 1979 and this is the first inspection that we have had by the NRC. Since we have corrected all of the violations I would like to ask that we be allowed to start using the equipment again. We have not used it since the inspection.

I am enclosing copies of some of the corrospondence with your agency since the inspection and if you desire further information please let us know.

Respectfully Submitted,

PRILLAMAN & PACE, INC.

Richard A. Prillaman

Richard A. Prillaman
President

cc: Mr James P. O'Reilly
Regional Administrator

Notary Public April 26, 1984

MY COMMISSION EXPIRES JANUARY 29, 1988

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

JUN 2 6 1984

License No. 45-18492-01
EA 84-19

Prillaman & Pace, Inc.
ATTN: Mr. Richard Prillaman, President
P. O. Box 4667
Martinsville, VA 24112

Gentlemen:

SUBJECT: CIVIL PENALTY - EA-84-19 (REFERENCE REPORT NO. 45-18492-01/84-01)

This will acknowledge receipt of your letter dated April 26, 1984, in response to the Notice of Violation and Proposed Imposition of Civil Penalty sent to you by letter dated April 5, 1984 from the Regional Administrator, Region II. The April 5, 1984 letter concerned violations found during a routine inspection of your facility on January 18, 1984.

After careful consideration of your response, and for the reasons given in the enclosed Order and Appendix, we have concluded that the violations did occur as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty. We have also given careful consideration to your request for remission of the proposed penalty and have concluded that no adequate reasons have been stated as to why the penalty should be remitted or mitigated. Accordingly, we hereby serve the enclosed Order on Prillaman & Pace, Inc., imposing a civil penalty in the amount of One Thousand Dollars.

We have examined the response you provided to the Notice of Violation pursuant to 10 CFR 2.201 and find that you have met the related requirements of 10 CFR 2.205. The actions taken to correct the violations and to prevent their recurrence will be evaluated during future inspections of your facilities.

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

Sincerely,

James M. Taylor, Acting Director
Office of Inspection and Enforcement

Enclosures:
1. Order Imposing Civil Monetary Penalty
2. Appendix - Evaluations and Conclusions

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of)

PRILLAMAN & PACE, INC.)
P. O. Box 4667) License No. 45-18492-01
Martinsville, VA 24112) EA 84-19

ORDER IMPOSING MONETARY CIVIL PENALTY

I

Prillaman & Pace, Inc., P. O. Box 4667, Martinsville, Virginia 24112 (the "licensee") is the holder of License No. 45-18492-01 (the "license") issued by the Nuclear Regulatory Commission (the "Commission") which authorizes the licensee to possess and use a moisture-density gauge in accordance with conditions specified therein. The license was issued on May 17, 1979.

II

As a result of a routine safety inspection conducted on January 18, 1984 by the Commission's Region II inspection staff, several violations were identified, all of which were attributed to inadequate management of the licensed program by persons who were unfamiliar with NRC requirements and the provisions of the NRC License.

Of the violations, the NRC was most concerned with the failure by the licensee to evaluate the October 1980 reported exposure of 4680 millirems to the film badge assigned to the user of the moisture-density gauge. The NRC served the licensee a written Notice of Violation and Proposed Imposition of Civil Penalty by letter dated April 5, 1984. The Notice identified the license conditions and NRC regulations that had been violated, described the violations, and stated the amount of the civil penalty proposed for the violations. The

licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalty with a letter dated April 26, 1984.

III

Upon consideration of the Prillaman & Pace, Inc. response (April 26, 1984) and the statements of fact, explanation, and argument for remission or mitigation contained therein, the Director of the Office of Inspection and Enforcement has determined, as set forth in the Attachment to this Order, that the violations did occur as set forth in the Notice of Violation and that there is no adequate basis for mitigation or remission of the proposed penalty.

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 One Thousand Dollars within 30 days of the date of this Order, by check, draft, or money order payable to the Treasurer of the United States and mailed to the Director of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

V

The licensee may within 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 Penalty referenced in Section II above, and

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

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Acting Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 28th day of June 1984

APPENDIX

EVALUATION AND CONCLUSIONS

The violations resulting in the civil penalty as set forth in the Notice of Violation, EA 84-19, April 5, 1984, are restated and the staff's evaluations and conclusions regarding the licensee's response dated April 26, 1984 are presented below.

Statement of Violations

1. License Condition 17 requires the licensee to possess and use its licensed material in accordance with statements contained in the license application dated April 6, 1979. Item 7 of the license application states that the licensee has a radiation protection officer and identifies the radiation protection officer by name.

   Contrary to the above, since 1980, the named radiation protection officer had not been in the licensee's employ and no amendment of the license was sought by the licensee. Consequently, the licensee was without a radiation safety officer during this time.

2. 10 CFR 20.201(b) requires the licensee to make such surveys as: (1) may be necessary for the licensee to comply with the regulations in 10 CFR Part 20, and (2) are reasonable under the circumstances to evaluate the extent of the radiation hazards that may be present. A "survey" is defined in 10 CFR 20.201(a) as an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions.

   Contrary to the above, the licensee failed in October 1980 to evaluate a film badge reading of 4680 millirems to determine if the worker to whom the badge was assigned had received an exposure in excess of limits specified in 10 CFR 20.101.

3. License Condition 13 requires the licensee to test each sealed source containing licensed material for leakage or contamination at intervals not to exceed six months.

   Contrary to the above, between July 1982 and January 1984, a period of 19 months, the licensee did not test its cesium-137 and americium-241 sealed sources for leakage or contamination.

4. 10 CFR 20.203(e) requires a licensee to post each area or room in which licensed material is used or stored and which contains any radioactive material (other than natural uranium or thorium) in an amount exceeding 10 times the quantity of such material specified in Appendix C of 10 CFR 20, with a conspicuous sign or signs bearing the radiation caution symbol and the words: "Caution Radioactive Material," unless excepted under 10 CFR 20.204.

Contrary to the above, on January 18, 1984, the licensee had not posted the room in which a gauge containing 10 millicuries of cesium-137 and 50 millicuries of americium-241 was stored. Ten times the quantity of cesium-137 specified in Appendix C of 10 CFR Part 20 is 0.1 millicurie; for americium-241 it is 0.0001 millicurie. The radiation level at 12 inches from the source container was greater than 5 millirems per hour, a level not excepted by 10 CFR 20.204.

5. 10 CFR 19.11 requires a licensee to post current copies of 10 CFR Parts 19 and 20 and its NRC license in a sufficient number of places to permit individuals engaged in licensed activities to observe them on the way to or from the licensed activity area to which the documents apply. If posting the documents is not practicable, the licensee may post a notice which describes the documents and states where they may be examined. It also requires posting of Form NRC-3, "Notice to Employees."

   Contrary to the above, on January 18, 1984, the licensee had not posted the current copies of 10 CFR Parts 19 and 20 and its NRC license or a notice describing the documents and stating where they might be examined, nor had the licensee posted a Form NRC-3.

6. 10 CFR 71.5(a) requires a licensee who transports licensed material outside the confines of his plant to comply with the Department of Transportation regulations appropriate to the mode of transport as provided in 49 CFR Parts 170-189.

   49 CFR 172.200(a) requires each shipper of hazardous material to describe the material in shipping papers which accompany the shipment.

   Contrary to the above, the licensee transported its gauge, containing hazardous material, to several job sites in a company truck unaccompanied by shipping papers.

7. 10 CFR 20.401(a) requires a licensee to maintain records showing radiation exposure to individuals for whom personnel monitoring is required under 10 CFR 20.202.

   Contrary to the above, records showing radiation exposure to an employee, who used the licensed gauge and was required to use personnel monitoring, were not maintained for each month in which the gauge was used.

   Collectively, the violations have been evaluated as a Severity Level III problem (Supplements IV and VI).

   (Cumulative Civil Penalties of $1,000 assessed equally among the violations.)

Licensee's Response

In response to the first violation, the licensee admitted the violation as described but argued that the civil penalty should not be assessed on the grounds that the current management had not been properly informed by the former officer of the corporation who managed NRC licensed activities. The former officer left the corporation on December 31, 1980, and since that time management had assumed that the certified operator was operating in compliance with NRC regulations and license conditions.

In response to the second violation, the licensee explained the reading of the film badge by stating that the operator had stored his film badge with the equipment. The licensee supplied no explanation for the other violations; however, the corrective action for all violations was described.

NRC Evaluation

As described in the first violation above, the licensee is required to have a radiation protection officer identified by name in the license. The responsibility to ensure compliance with the terms of the license ultimately rests with the licensee, not the individual named to fill a particular position.

Although the licensee has adequately explained the film badge reading of 4680 millirems, it failed in its responsibility to evaluate such a reading in a timely manner. This evaluation is required by the regulations and is necessary in order to determine whether an individual has received an exposure in excess of limits specified in 10 CFR 20.101.

In reference to the overall program, it was the licensee's responsibility to ensure continuity when a key individual departed, not only to ensure that a person served as a radiation protection officer as required by the license, but also to ensure that licensed activities received appropriate oversight and control. Steps should have been taken in December 1980 to reassign the duties of the former radiation protection officer to a qualified individual acceptable to the NRC.

The licensee also asserts that it has taken remedial actions and corrected all violations for which it was cited. Such remedial actions, however, are always required, and will not be considered as factors mitigating the proposed civil penalty unless they were unusually prompt or extensive. As in this instance the licensee has failed to show that the measures taken were unusually prompt or extensive, these actions do not constitute a basis for mitigation of the proposed civil penalty.

Conclusion

After carefully reconsidering the circumstances of this case, the staff has concluded that the amount of the civil penalty as originally proposed is appropriate.

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

License No. 34-07251-03
EA 84-79

The Cincinnati Gas and
Electric Company
ATTN: Mr. Steve Salay
Manager, Electric Production
Department
139 East Fourth Street
Cincinnati, OH 45202

Gentlemen:

This refers to the special safety inspection conducted by Mr. W. J. Slawinski of our staff on June 13, 1984, of activities at Miami Fort Station in North Bend, Ohio, authorized by NRC Byproduct Material License No. 34-07251-03. The results of the inspection were discussed on June 29, 1984, during an enforcement conference in the Region III office between you and other members of your staff and Mr. A. B. Davis and other members of the NRC staff.

The inspection showed, among other things, that unauthorized individuals removed an Ohmart Model SHRM-PA source holder containing a 10 millicurie cesium-137 sealed source from a coal chute and stored it in an unrestricted area without having secured it against unauthorized removal. As a result, the source holder was missing and attempts to find it have been unsuccessful. A second similar device apparently broke off its mounting, was mistaken for scrap, and was apparently sold to a scrap dealer.

To emphasize the importance of these matters and the need to ensure effective management control of your licensed program, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the attached Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Five Hundred Dollars. The violations have been categorized in the aggregate as a Severity Level III problem in accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984).

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, describe what management procedures will be implemented to ensure that only authorized individuals will be permitted to handle licensed radioactive materials. 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 accompanying Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

Original signed by
James G. Keppler

James G. Keppler
Regional Administrator

Enclosure: Notice of Violation
and Proposed Imposition of
Civil Penalties

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

The Cincinnati Gas and Electric Company

License No. 34-07251-03
EA 84-79

As a result of a special safety inspection conducted on June 13, 1984, of activities at Cincinnati Gas and Electric Company, Miami Fort Station in North Bend, Ohio, authorized under NRC License No. 34-07251-03, it appears that violations of NRC requirements have occurred. Unauthorized individuals removed an Ohmart Model SHRM-PA source holder containing a 10 millicurie cesium-137 sealed source and stored it in an unrestricted area without being secured against unauthorized removal. As a result, the source holder was missing and attempts to find it have been unsuccessful. A second similar device apparently broke off its mounting, was mistaken for scrap, and was apparently sold to a scrap dealer.

In order to emphasize the significance of these violations and the need to ensure effective control over your licensed activities, the NRC proposes to impose civil penalties in the cumulative amount of Five Hundred Dollars. In accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violations and the associated civil penalties are set forth in Section I below:

I. Civil Penalty Violations

A. License Condition No. 16 states installation, relocation, maintenance, and repair of devices containing licensed material and installation, replacement, and disposal of sealed sources containing licensed material used in devices shall be performed only by Ohmart Corporation or by other persons specifically authorized by the Commission or an Agreement State to perform such services.

Contrary to the above, an individual or individuals other than Ohmart Corporation or other authorized person, removed a device containing a 10 millicurie cesium-137 sealed source from its mounted location sometime between December 19, 1978 and September 11, 1980. A second similar device apparently broke off its mounting, was mistaken for scrap, and was apparently sold to a scrap dealer sometime between September 11, 1980 and March 7, 1984.

B. 10 CFR 20.207(a) requires that licensed materials stored in an unrestricted area be secured against unauthorized removal from the place of storage. 10 CFR 20.207(b) requires that materials in an unrestricted area and not in storage be under constant surveillance and immediate control of the licensee. As defined in 10 CFR 20.3 (a)(17), an unrestricted area is any area access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above, between October 6, 1980 and March 7, 1984, an Ohmart Corporation Model SHRM-PA source holder device containing a nominal 10 millicurie cesium-137 sealed source was not secured from unauthorized removal while stored in an unrestricted area. On October 6, 1980, the device was stored in the basement of Crusher house Number 2 and subsequently was moved to another storage area in the basement of Generating Unit Number 7. Both of these areas are unrestricted areas. The device is missing and attempts to find it have been unsuccessful.

C. License Condition No. 14 states that physical inventories shall be conducted every 6 months to account for all sealed sources received and possessed under the license. The records of the inventories shall include the quantities and kinds of byproduct material, location of sealed sources, and the date of the inventory.

Contrary to the above, inventories were conducted on December 18, 1978, September 11, 1980, and March 7, 1984, a period greater than 6 months. Also, the September 11, 1980, inventory record did not include the quantity or kind of byproduct material.

Collectively, the above three violations have been evaluated as a Severity Level III problem (Supplements VI and IV).

(Cumulative Civil Penalties - $500 assessed equally among the violations)

II. Violations not Assessed Civil Penalties

A. License Condition No. 15 requires that sealed sources be tested for leakage and/or contamination at intervals not to exceed three years. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.

Contrary to the above, tests for leakage and/or contamination of 27 nuclear gauges containing from 5 to 50 millicuries of cesium-137 each, were not performed during the period December 20, 1978, through March 11, 1984.

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

B. 10 CFR 30.51(a) requires that each person who receives byproduct material pursuant to a license issued pursuant to the regulations in this part and Parts 31-35 shall keep records showing the receipt, transfer, and disposal of such byproduct material.

Contrary to this requirement, the licensee failed to maintain receipt records for the 27 gauges containing licensed material that the licensee received during the period 1973 through 1984.

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

Pursuant to the provisions of 10 CFR 2.201, the Cincinnati Gas and Electric Company is hereby required to submit to the Director, Office of Inspection and Enforcement, NRC, Washington, DC 20555, with a copy to the Regional Administrator, USNRC, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of this Notice, a written statement or explanation in reply, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps that have been taken and the results achieved; (4) the corrective steps that will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Cincinnati Gas and Electric Company may pay the civil penalties in the amount of Five Hundred Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should the Cincinnati Gas and Electric Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement, will issue an order imposing the civil penalties in the amount proposed above. Should the Cincinnati Gas and Electric Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer may: (1) deny the violations listed in this Notice, in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties, in whole or in part, such answer may request remission or mitigation of the penalty. In requesting mitigation of the proposed penalties, the five factors contained in Section V.B of 10 CFR Part 2, Appendix C should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Cincinnati Gas and Electric Company 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 17th day of August 1984

THE CINCINNATI GAS & ELECTRIC COMPANY

September 14, 1984

License No. 34-07251-03
EA 84-79

Director, Office of Inspection
and Enforcement
United States Nuclear
Regulatory Commission
Washington, D.C. 20555

Gentlemen:

RE: MIAMI FORT STATION-UNITS 7&8
NOTICE OF VIOLATION AND PROPOSED
IMPOSITION OF CIVIL PENALTIES

In accordance with the provisions of 10 CFR 2.201, the attached statement is in response to NRC letter dated August 17, 1984 (Mr. James G. Keppler to Mr. Steve Salay).

Should you have any questions or require any additional information, please feel free to contact me at 513/632-2660 or Mr. G. C. Ficke at 513/632-2672.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By James D. Flynn
JAMES D. FLYNN, Manager
Licensing and Environmental Affairs
Department

GCF:cen

Attachment

State of Ohio) ss.
County of Hamilton)

Sworn to and subscribed before me, this 14th day of September, 1984.

Alice M. Leurck
Notary Public

ALICE M. LEURCK
Notary Public, State of Ohio
My Commission Expires December 16, 1988

Re: Miami Fort Station-Units 7&8
Notice of Violation and Proposed
Imposition of Civil Penalties

cc: Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glenn Ellyn, Illinois 60137

ATTACHMENT

I. Civil Penalty Violations

A. License Condition No. 16 states installation, relocation, maintenance, and repair of devices containing licensed material and installation, replacement, and disposal of sealed sources containing licensed material used in devices shall be performed only by Ohmart Corporation or by other persons specifically authorized by the Commission or an Agreement State to perform such services.

Contrary to the above, an individual or individuals other than Ohmart Corporation or other authorized person, removed a device containing a 10 millicurie cesium-137 sealed source form its mounted location sometime between December 19, 1978 and September 11, 1980. A second similar device apparently broke off its mounting, was mistaken for scrap, and was apparently sold to a scrap dealer sometime between September 11, 1980 and March 7, 1984.

Response

- The alleged removal of licensed material by unauthorized personnel occurred because station personnel were not fully aware of the requirements contained in NRC Byproduct Material License No. 34-07251-03.

- To correct this, training has been conducted for station personnel to make them aware of the nuclear gauges, their uses, potential hazards, NRC license requirements, and individual responsibilities. This training of approximately 1½ to 2 hours in duration, was given to approximately 300 individuals. Subsequent to this training, station personnel are now aware of NRC license requirements.

- Retraining of station personnel will be conducted on a three (3) year interval, in accordance with a written procedure and training plan, until such time the gauges are removed from the station by authorized personnel. This retraining which stresses individual responsibilities will preclude recurrence.

- Compliance with license condition 16 was achieved on July 1, 1984.

B. 10 CFR 20.207(a) requires that licensed materials stored in an unrestricted area be secured against unauthorized removal from the place of storage. 10 CFR 20.207(b) requires that materials in an unrestricted area and not in storage be under constant surveillance and immediate control of the licensee. As defined in 10 CFR 20.3(a)(17), an unrestricted area is any area access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Re: Civil Penalty Violations

Contrary to the above, between October 6, 1980 and March 7, 1984, an Ohmart Corporation Model SHRM-PA source holder device containing a nominal 10 millicurie cesium-137 sealed source was not secured from unauthorized removal while stored in an unrestricted area. On October 6, 1980, the device was stored in the basement of Crusher House Number 2 and subsequently was moved to another storage area in the basement of Generating Unit Number 7. Both of these areas are unrestricted areas. The device is missing and attempts to find it have been unsuccessful.

Response

- The alleged failure to secure licensed materials that were stored in an unrestricted area occurred because station personnel were not fully aware of the requirements contained in 10 CFR 20.207.

- Provisions have been made to secure stored licensed materials inside an appropriately marked cabinet, which is locked, and which is further contained inside a locked storage room. The Station Manager controls the issuance of keys to the storage room and the storage cabinet to prevent unauthorized removal.

- The establishment of a locked and controlled storage area for licensed material will preclude recurrence..

- Full compliance was achieved in June of 1984.

C. License Condition No. 14 states that physical inventories shall be conducted every 6 months to account for all sealed sources received and possessed under the license. The records of the inventories shall include the quantities and kinds of byproduct material, location of sealed sources, and the date of the inventory.

Contrary to the above, inventories were conducted on December 18, 1978, September 11, 1980, and March 7, 1984, a period greater than 6 months. Also, the September 11, 1980, inventory record did not include the quantity or kind of byproduct material.

Response

- The alleged failure to perform physical inventories of licensed material occurred because station personnel were not fully aware of the requirements contained in NRC Byproduct Material License No. 34-07251-03.

- A physical inventory was started on March 7, 1984, and officially documented on June 13, 1984, which accounted for the remaining licensed material.

Re: Civil Penalty Violations

- Training has been conducted at the station to make key personnel aware of license requirements, including requirement to perform a physical inventory. In addition, a procedure has been developed with a data sheet that specifies physical inventory requirements. This procedure as well as the training provided to station personnel will preclude recurrence.

- Full compliance was achieved on July 1, 1984.

II. Violations not Assessed Civil Penalties

A. License Condition No. 16 requires that sealed sources be tested for leakage and/or contamination at intervals not to exceed three year. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.

Contrary to the above, tests for leakage and/or contamination of 27 nuclear gauges containing from 5 to 50 millicuries of cesium-137 each, were not performed during the period December 20, 1978, through March 11, 1984.

Response

- Alleged failure to perform leak tests of sealed sources occurred because station personnel were not fully aware of the requirements contained in NRC Byproduct Material License No. 34-07251-03.

- A leak test of the remaining sources was performed on March 11, 1984.

- Training has been conducted to make key personnel at the station aware of license requirements, including the requirement to perform leak tests. In addition, a procedure has been developed that specifies leak test requirements. This procedure as well as the training provided to station personnel will preclude recurrence

- Full compliance was achieved on July 1, 1984.

B. 10 CFR 30.51(a) requires that each person who receives byproduct material pursuant to a license issued pursuant to the regulations in this part and Parts 31-35 shall keep records showing the receipt, transfer, and disposal of such byproduct material.

Contrary to this requirement, the licensee failed to maintain receipt records for the 27 gauges containing licensed material that the licensee received during the period 1973 through 1984.

Re: Civil Penalty Violations

Response

- The alleged failure to maintain receipt records occurred because station personnel were not fully aware of the requirements contained in 10 CFR 30.51.

- The original equipment vendor has been contacted and has in turn supplied copies of the original packing lists dated March 19, 1974, October 17, 1974, and January 19, 1976, which accompanied the shipment of licensed material to the Miami Fort Station.

- Copies of the documentation described above have been included in the appropriate files at the Miami Fort Station to document the shipment and receipt of these devices.

- Full compliance was achieved on August 22, 1984.

THE CINCINNATI GAS & ELECTRIC COMPANY

September 14, 1984

License No. 34-07251-03
EA 84-79

Director, Office of Inspection
and Enforcement
United States Nuclear
Regulatory Commission
Washington, D.C. 20555

Gentlemen:

RE: MIAMI FORT STATION-UNITS 7&8
NOTICE OF VIOLATION AND PROPOSED
IMPOSITION OF CIVIL PENALTIES

In accordance with 10 CFR 2.205(b) and in response to your letter dated August 17, 1984 (Mr. James G. Keppler to Mr. Steve Sala), The Cincinnati Gas & Electric Company (CG&E) has attached payment in the amount of Five Hundred Dollars to cover the assessment noted in the letter.

Although CG&E has elected not to protest imposition of the proposed civil penalty, the Company believes its full remission is justified on the basis of the comprehensive and timely corrective actions which were taken by the Licensee. The alleged violations described in the NRC August 17, 1984 Notice of Violation and in NRC Inspection Report No. 030-09838/84-01(DRSS) were identified by CG&E and the apparent loss of two (2) radioactive sources reported to the NRC in accordance with 10 CFR 20.402. Following a thorough investigation by CG&E and its contractors, the existing program for control of these devices was upgraded through the development and implementation of procedures which require extensive controls on use of these devices, as well as periodic audits and personnel training. Procedures were instituted not only at the subject generating station but at all generating stations within the CG&E system. Adherence to the requirements of this program will ensure that future activities associated with such devices are conducted in accordance with the Commission's regulations.

Re: Miami Fort Station-Units 7&8
Notice of Violation and Proposed
Imposition of Civil Penalties

CG&E conducted an investigation and physical search in order to exhaust any possibility of locating the missing radioactive sources. The investigation consisted of interviews with station personnel to ascertain information regarding the sources and the posting of a memorandum which requested that those having any information concerning the sources contact the Superintendent of the Technical Services at the station. Visual searches of the station and grounds were conducted on several occasions and further surveys were conducted utilizing radiation monitors and metal detectors in an attempt to locate the sources. Following this, the source manufacturer, Ohmart Corporation, was contracted to perform an independent search of the station utilizing radiation monitors. Interviews with station personnel during these searches had indicated that the sources (contained in their source holders), may have been mistaken as scrap metal by station employees. Heavy equipment was utilized to relocate coal piles in an attempt to identify past scrap metal burial sites at the station. CG&E personnel visited a local scrap metal dealer who would have been the likely recipient of this material, had it been shipped off site as scrap metal.

This investigation and the physical searches resulted in the expenditure of approximately 156 manhours by CG&E, in addition to approximately $5,350 in Contractor costs. This effort, we feel, clearly satisfied the Commission's intent that non-compliance should be more expensive than compliance, and, on this basis alone, we believe the Commission would be justified in totally remitting the proposed fine.

We believe the corrective action which has been effected by the Licensee at Miami Fort Station to prevent recurrence far exceeded that which the NRC customarily observes. The action taken can be characterized as prompt and extensive in that the program instituted is not limited to those areas cited in the subject Notice of Violation but represents a comprehensive program for future periodic audits, personnel training, source inventories, and leak detection tests performed in accordance with approved procedures.

Re: Miami Fort Station-Units 7&8
Notice of Violation and Proposed
Imposition of Civil Penalties

CG&E is currently re-evaluating the use of such devices, and, where appropriate, the devices are being permanently removed and returned to the manufacturer for disposal. If you should have any questions regarding this matter or require any additional information, please feel free to contact me at 513/632-2660 or Mr. G. C. Ficke at 513/632-2672.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By
JAMES D. FLYNN, Manager
Licensing and Environmental Affairs
Department

GCF:cen

Attachment

cc: Regional Administrator, Region III
US Nuclear Regulatory Commission
799 Roosevelt Road
Glenn Ellyn, Illinois 60137

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

April 12, 1984

Docket No. 30-20952
License No. 29-02477-09
EA 84-20

U.S. Testing Company, Inc.
ATTN: Mr. I. J. Fuchs
Executive Vice President
1415 Park Avenue
Hoboken, New Jersey 07030

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

This refers to the NRC special safety inspection conducted on March 2-3, 1984 of activities authorized by NRC License No. 29-02477-09, which were being performed at a temporary job site at the Pilgrim Nuclear Power Station, Plymouth, Massachusetts. The inspection was conducted to review the circumstances associated with an exposure in excess of regulatory limits to the hand of one of your employees during the performance of licensed activities. The report of the inspection was provided to you on March 16, 1984.

During the inspection, additional violations of NRC requirements were identified. These violations, which are described in the enclosed Notice, involved failure to follow emergency and operating procedures, and failure to perform adequate surveys and evaluations prior to the attempted retrieval of a disconnected 24 curie iridium-192 source. As a result, an employee received a calculated radiation exposure of about 33 rem to one of his hands. These violations, their causes, and your corrective actions were discussed at an enforcement conference held in the Region I office with you and other members of your staff on March 16, 1984.

These violations are of concern to the NRC because they represent inadequate control of radiography sources, which have a potential for serious exposure to workers and members of the public if proper precautions are not followed. Of equal concern to the NRC in this case is the fact that these violations are similar to violations which previously occurred during a similar source disconnect on June 10, 1983. In that instance, an employee of one of your consultants received an exposure in excess of regulatory limits during an attempted retrieval of another iridium-192 source. On October 7, 1983, a Notice of Violation and Proposed Imposition of Civil Penalties was issued to U.S. Testing Company, Inc. in the cumulative amount of $8,000 in that instance.

In your response to the violations identified in the NRC's October 7, 1983 letter, you informed us of the specific corrective actions taken to prevent recurrence of similar violations. As evidenced by the recurrence of these violations, your corrective actions were not sufficient.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

To emphasize the importance of your responsibility for properly controlling licensed activities, and the importance of prompt and effective corrective actions to prevent recurrence of violations, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of Ten Thousand Dollars ($10,000) for the violations set forth in Section I of the enclosed Notice.

The violations in Section I have been categorized in the aggregate as a Severity Level III problem pursuant to the General Statement of Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C. Although the base civil penalty for a Severity Level III problem is $4,000, the NRC has decided to propose civil penalties in the amount of Ten Thousand Dollars because these violations are similar to the violations which occurred on June 10, 1983, and it was fortuitous that an even higher exposure was not received by the individual. Penalties in this amount are appropriate to emphasize the need for effective, lasting corrective actions to improve your recent performance, particularly in handling radioactive material in emergency situations. The violation described in Section II of the enclosed Notice is classified at Severity Level IV and a civil penalty is not proposed.

You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. In your response, reference may be made, where appropriate, to your letter dated March 30, 1984, to Thomas T. Martin, Director, Division of Engineering and Technical Programs. Your response, and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

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

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

Sincerely,

Thomas E. Murley
Regional Administrator

Enclosure:
Notice of Violation and
Proposed Imposition of Civil Penalties

cc: Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
Commonwealth of Massachusetts
State of New Jersey
Boston Edison Company

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

U. S. Testing Company, Inc.
1415 Park Avenue
Hoboken, New Jersey 07030

Docket No. 30-20952
License No. 29-02477-09
EA No. 84-20

An NRC special safety inspection of U. S. Testing Company, Inc., activities authorized under NRC License No. 29-02477-09 was conducted at a temporary job site at the Pilgrim Nuclear Power Station, Plymouth, Massachusetts, on March 2-3, 1984 to review the circumstances associated with an exposure in excess of regulatory limits to the hand of an employee of U.S. Testing Company, Inc. As a result of the inspection, it was determined that emergency and operating procedures were not followed, and an adequate survey and evaluation were not performed prior to an attempted retrieval of a disconnected 24 curie iridium-192 source. As a result, an employee received a radiation exposure to one of his hands calculated by the NRC to be 33 rem. The violations arising from this incident are similar to violations which occurred on June 10, 1983, which resulted in the issuance of a $8,000 civil penalty on October 7, 1983.

To emphasize the importance of the licensee's responsibility for properly controlling licensed activities, particularly the control of radiography sources which have such a high potential for serious exposure to workers and members of the public, and also to emphasize the importance of prompt and effective corrective actions to prevent recurrence of violations, the Nuclear Regulatory Commission proposes the imposition of cumulative civil penalties in the amount of Ten Thousand Dollars for the violations described in Section I below. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the violations and the associated civil penalties are set forth in Section I below:

I. VIOLATIONS ASSESSED CIVIL PENALTIES

A. 10 CFR 20.101(a) prohibits the use of licensed material in such a manner as to cause any individual in a restricted area to receive in any calendar quarter from radioactive materials or other sources of radiation a total occupational radiation dose in excess of 18.75 rem to the hands.

Contrary to the above, during the first calendar quarter of 1983, specifically on March 1, 1984, an employee of U.S. Testing Company, Inc., while uncoupling and recoupling the guide tube containing a 24 curie iridium-192 source that had disconnected from a U.S. Testing Company, Inc., radiography device, received a radiation exposure to one of his hands calculated to be about 33 rem.

B. 10 CFR Part 20.201(b) requires that each licensee make such surveys as (1) are necessary to comply with regulations in 10 CFR 20 and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As defined in 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above, on March 1, 1984, an adequate survey was not performed prior to uncoupling a source guide tube containing a disconnected 24 curie iridium-192 source from its radiography device, in that the radiation levels in the area of the source guide tube and coupling were not determined and the exposure that could be received by the individual was not estimated and shown to be less than the 18.75 rem limit to the extremities.

C. Condition 17 of License No. 29-02477-09 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated November 21, 1979 and January 29, 1982, and letters dated December 18, 1979, November 6, 1980, November 17, 1980, January 25, 1983, July 1, 1983, July 27, 1983, September 9, 1983, September 12, 1983 and a letter dated December 1, 1983 with attachments.

The December 1, 1983 letter includes the U.S. Testing Company, Inc., Emergency Procedures. Section IV, Part B, Item 6 of these Emergency Procedures requires that the Radiation Protection Officer be notified if a radiography source cannot be cranked back into the fully shielded position for any reason, and that the Radiation Protection Officer determine the course of action to be followed.

Contrary to the above, on March 1, 1984, the Radiation Protection Officer was not immediately notified when it was determined that a source could not be cranked back into a fully shielded position. The radiographer uncoupled the source guide tube and reconnected it prior to notifying the Radiation Protection Officer.

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

(Cumulative Civil Penalties of $10,000 assessed equally among the violations.)

II. VIOLATION NOT ASSESSED A CIVIL PENALTY.

Condition 17 of License No. 29-02477-09 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated November 21, 1979 and January 29,

1982, and letters dated December 18, 1979, November 6, 1980, November 17, 1980, January 25, 1983, July 1, 1983, July 27, 1983, September 9, 1983, September 12, 1983, and a letter dated December 1, 1983, with attachments. The December 1, 1983 letter includes the U.S. Testing Company, Inc., Operating Procedures. Section III, Attachment G-1, Item 9, of these operating procedures requires that the radiographer, after making the connection of the source connector and the drive cable, test that the connection has been properly made.

Contrary to the above, on March 1, 1984, a radiographer, after making the connection of the source connector and the drive cable, failed to test that the connection had been properly made.

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

Pursuant to the provisions of 10 CFR 2.201, U.S. Testing Company, Inc., is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, DC 20555, with a copy to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps that will be taken and the results achieved; (4) the corrective steps that will be taken to avoid further violations; and (5) the date when full compliance will be achieved. In your response, reference may be made, where appropriate, to your letter dated March 30, 1984, to Thomas T. Martin, Director, Division of Engineering and Technical Programs. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

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

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

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 12th day of April 1984

UNITED STATES TESTING COMPANY, INC.

1415 PARK AVENUE, HOBOKEN, NEW JERSEY 07030 (201) 792-2400

Laboratories in Principal Cities

EST. 1880

May 4, 1984

Director
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, D.C. 20555

References: Docket No. 30-20952
License No. 29-02477-09
EA 84-20

Gentlemen:

In accordance with the requirements of 10 CFR 2.201, we are responding to the Notice of Violation dated April 12, 1984.

Violation I.A.

An employee of the United States Testing Company, Inc. (USTC), while uncoupling and recoupling the guide tube containing a 24.1 curie Iridium-192 source that had disconnected from a USTC device received a radiation exposure calculated to be about 33 Rem.

Response to Violation I.A.

As a result of the reenactment which took place March 3, 1984, the NRC inspectors determined that a "conservative distance" to use was 1.5 inches from the source. USTC submits that this distance is conjecture, as the inspection report specifically states "The Inspectors could not determine the exact location of the source compared to the hands," In its collective judgement, based on a thorough review of all available information, USTC believes that the choice of 1.5 inches is overly conservative. While neither USTC nor the NRC can support a specific distance, it must be noted that a distance of approximately 2 inches would have resulted in an exposure less than the regulatory limit of 18.75 Rem to the extremity.

USTC requests that the NRC reevaluate this violation with the hope of a less severe conclusion.

Violation I.B.

An adequate survey was not conducted prior to uncoupling a source guide tube in that radiation levels were not determined and that the exposure that could be received was not estimated and shown to be less than the 18.75 Rem limit to the extremities.

Response to Violation I.B.

1. USTC admits that the survey of the exposure device, and the subsequent actions taken by an individual radiographer in an emergency situation did not comply with the requirements of 10 CFR 20.201 (b).

2. The violation occurred because an individual radiographer, under the stress of an emergency situation, violated specific instructions issued by USTC, and took an action - the uncoupling of the guide tube - contrary to those instructions.

3. An extensive emphasis on total compliance with our Operating and Emergency Procedures has been undertaken. Reference is made to the letter dated March 30, 1984 from Mr. I.J. Fuchs, Senior Vice President, USTC to Mr. Thomas T. Martin, Director, Division of Engineering and Technical Programs, NRC Region I. The face-to-face contact between the Radiation Safety Officer or Emergency Safety Officer with each Radiographer has been completed. The T/O 533 units have been removed from service. A more stringent personnel policy with respect to violations has been introduced. A management change has been made. A Corporate Officer has communicated with each Radiographer relative to personnel safety.

Violation I.C.

The Radiation Protection Officer was not immediately notified when a radiography source could not be cranked back into the fully shielded position.

Response to Violation I.C.

1. USTC acknowledges that this requirement of its Operation and Emergency Procedures was not followed.

2. As indicated above, an individual radiographer, under the stress of an emergency situation, apparently did not stop to review and apply the emergency procedures. It is assumed that he acted with good intentions to rectify what he must have considered a bad situation, without full consideration of the ramifications of his action.

3. Corrective actions taken to date are those described in the letter of March 3, 1984 referenced above.

4. Additional corrective actions to be taken in the immediate future re being designed to instill a response to an emergency occurence that conforms to our developed emergency procedures and not to the uncontrolled response that human nature often dictates in a stressful situation.

Under consideration is the preparation of one or more audio cassette programs, distributed to major sites. These cassettes could be prepared by The Radiation Safety Officer, The Emergency Safety Officer, and Senior Management, as appropriate. From time to time, eye-catching bulletins and flyers will be distributed to the home address of all Radiographic personnel. A copy of a bulletin which has already been sent is attached.

A series of training modules are in preparation for presentation to seminars attended by Radiation Protection Officers and the Emergency Safety Officer. These will cover malfunctions and emergencies, and the safest way to deal with them.

5. We anticipate that all of the preceding corrective actions will be actively underway before the end of the second quarter of this year.

Violation II.

A radiographer, after making the connection of the source connector and the drive cable, failed to test that the connection had been properly made.

Response to Violation II.

1. USTC acknowledges that an adequate test of the connection of the source connection and the drive calbe was apparently not conducted.

2. The reason for the violation was that a fully trained technician did not follow the specific instruction contained in the Operating and Emergency Procedures.

3. With respect to corrective measures, we are considering the preparation of an audio cassette covering the step-by-step actions to be taken in conducting gamma radiography. This module would stress the practical, common - sense actions that must be taken for radiation safety.

In summary, USTC submist that the violations did not occur because of any deficiencies in its Operating and Emergency Procedures. Instead, an individual Radiographer, when confronted with an emergency situation for the first time, failed to overcome his natural tendency to get out of a troublesome situation by following his instincts. Our entire program for corrective action is directed to change this instinctive action to total and complete compliance with our Operating and Emergency Procedures.

We also request consideration of the separate communication in accordance with 10 CFR 2.205.

Very truly yours,

UNITED STATES TESTING COMPANY, INC.

Carl B. Yoder, P.E.
Radiation Safety Officer

CBY/lh

Encl:

cc: NRC Region I

UNITED STATES TESTING COMPANY, INC.

1415 PARK AVENUE, HOBOKEN, NEW JERSEY 07030 (201) 792-2400

Laboratories in Principal Cities

EST. 1880

Dear Radiographer:

When the radiographer involved in the recent incident at Pilgrim Power Station attempted to call for help, he had difficulty reaching an RPO because only the daytime business telephone numbers were provided in the Emergency Procedures. You have already received a wallet card with the business and home telephone numbers for Joe Driebelbis and me.

The enclosed bulletin provides business and home numbers for all RPO's. In the event of an emergency make your first call to the RPO you work with. If you can't reach him, there are four others on the list, as well as Joe and myself.

Also enclosed is a new wallet card with a very brief summary of our Emergency Procedures on the back.

With your cooperation, we will not have a repeat of the Pilgrim incident.

Sincerely,

UNITED STATES TESTING COMPANY, INC.

Carl B. Yoder, PE
Radiation Safety Officer

CBY/lh

Enclosures: 1 Poster
1 Blue Card

UNITED STATES TESTING CO., INC.
Non-Destructive Testing Division

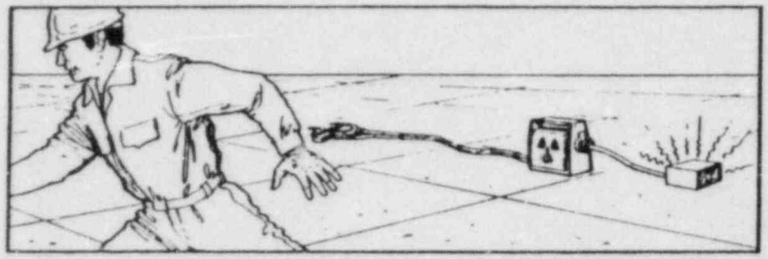
In the event of emergency involving radioactive sources, immediately inform:

Emergency Radiation Safety Officer:	**Radiation Safety Officer:**
Joseph Driebelbis	Carl B. Yoder, PE
Office: 215/775-9440	Office: 201/792-2400
Home: 215/775-0780	Home: 201/696-2871

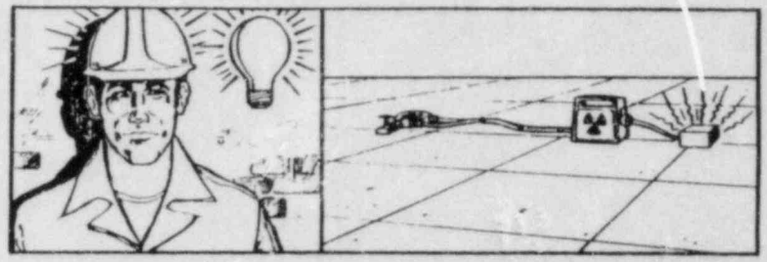
United States Testing Company, Inc.
Non-Destructive Testing Division

EMERGENCY PROCEDURES

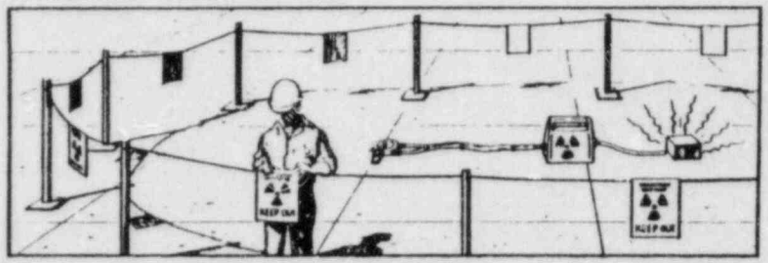
1. Move Away from Source at Once



2. Calm Down and Think



3. Establish Restricted Area



4. Call for Help

Emergency

RSO	Joe Dreibelbis	Office	215/775-9440
		Home	215/775-0780
RPO	Harding Brittain	Office	312/364-6566
		Home	312/394-3230
RPO	Jerry Grimm	Office	217/937-1111 x2412
		Home	217/875-5810
RPO	Charles Miller	Office	305/465-3550 x3713
		Home	305/878-1889
RSO	Carl B. Yoder	Office	201/792-2400
		Home	201/696-2871
RPO	Larry Weigel	Office	209/527-2271
		Home	209/838-3307
RPO	Rodger Worthington	Office	201/792-2400
		Home	201/370-2317

UNITED STATES TESTING COMPANY, INC.
1415 PARK AVENUE, HOBOKEN, NEW JERSEY 07030 (201) 792-2400
Laboratories in Principal Cities

EST. 1880

May 7, 1984

Director
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, D.C. 20555

References: Docket No. 30-20952
License No. 29-02477-09
EA 84-20

Gentlemen:

In accordance with 10 CFR 2.205(b), we are writing to request mitigation of a portion of the civil penalty of $10,00 proposed in the Notice of Violation dated April 12, 1984.

The specific response to that notice, as required by 10 CFR 2.201, accompanies this letter. As instructed by that notice, reference to that response will be made to avoid duplication. Each of the specific violations will be addressed.

Violation I.A. states that the hand of the Radiographer employed by the United States Testing Company, Inc. (USTC) was exposed to a calculated (emphasis added) 33.4 Rem when he uncoupled and recoupled the guide tube of an exposure device.

While USTC does not deny that some exposure took place, it submits that exposure stated in the Notice of Violation is based upon conjecture, without specific knowledge of the distance between the source and the hands of the Radiographer. In its judgement, USTC believes that the distance of 1.5 inches to be overly conservative.

In concurrence with the request by the NRC at the Enforcement Conference at Region I on March 16, 1984, USTC has obtained a medical examination of the Radiographer involved. The conclusion of the medical report: "Medical examination of the patient reveals no evidence of over-exposure to ionizing radiation." A copy of the two reports are enclosed.

USTC respectfully requests reclassification of this violation from Severity Level III to Severity Level IV.

UNITED STATES TESTING COMPANY, INC.

With respect to the other two violations for which a civil penalty has been proposed, USTC submits that they were not caused by any deficiencies in its Operating and Emergency Procedures but by the violation of these procedures by a well-trained individual Radiographer. In addition to 46 hours of Radiation Safety training from a recognized Trade School, he received 40 hours of Radiation Safety Training from USTC. Supplementary instruction, including the specific training module related to the previous incident which occurred on June 9-10, 1983, was administered. Still, when faced with an emergency situation on March 1, 1984, this Radiographer elected to totally violate the requirements of our Operating and Emergency Procedures.

As outlined in our response in accordance with the requirements of 10 CFR 2.201, USTC has embarked on an extensive program directed to behavior modification. In short, we are attempting to suppress instinctive, normal reaction to an emergency situation, and to instill an automatic total compliance with written procedures.

The Procedures are more than adequate to prevent the occurrence of incidents. USTC is committed to a series of actions which will reinforce a total commitment these procedures.

In consideration of this commitment, USTC requests that the proposed civil penalty of $10,000 for violations related to this incident be reduced to the normal civil penalty for Severity Level III violations, namely $4,000.

USTC does not underestimate the potential hazard from violations of regulatory requirements and established procedures. The NRC has our total commitment to the concept of maintaining the exposure of individual employees and the general public to the lowest achievable exposure.

Very truly yours,

UNITED STATES TESTING COMPANY, INC.

Carl B. Yoder, P.E.
Radiation Safety Officer

CBY/lh

Encls:

cc: NRC Region I

RMC
Radiation Management Corporation, 3508 Market St., Philadelphia, PA 19104 (215) 243-2950

April 30, 1984

Mr. Harding Brittain
U.S. Testing Company
989 Pauly Street
Elk Grove Village, IL 60007

Dear Mr. Brittain:

Please find enclosed a medical report on your employee, Kenneth Gates. If you have any questions, please give me a call.

My consultation fee for this service is $225.00. Please send the check to the following address:

Roger E. Linnemann, M.D.
517 S. Providence Road
Wallingford, PA 19086

Sincerely yours,

Roger E. Linnemann, M.D.
Vice Chairman

REL:tmm

Enclosure

MEDICAL REPORT

PATIENT: KENNETH GATES
3085 CHARING CROSS
ANN ARBOR, MICHIGAN 48104
(313) 971-1509

DATE: MARCH 22, 1984

FROM: ROGER E. LINNEMANN, M.D.

MEMORANDUM

TO: PATIENT FILE - KENNETH GATES

FROM: ROGER E. LINNEMANN, M.D.

SUBJECT: EXAMINATION

DATE: MARCH 22, 1984

Patient's address is: Kenneth Gates
3085 Charing Cross
Ann Arbor, Michigan 48104
(313) 971-1509

CHIEF COMPLAINT:

The patient is an industrial radiographer who was working at the Boston Edison Pilgrim Nuclear Plant x-raying pipes with an Ir-192 source. The source was approximately 25 curies. During the procedure the operator of the industrial radiography apparatus felt that the source became jammed in the guide tube. The patient disconnected the guide tube from the source container and saw that the leader of the source was disconnected from the mechanism that moves the source through the guide tube. He immediately connected the guide tube to the source container and then left the area. He felt that he was in the vicinity of the exposed source in the guide tube for 15 to 20 seconds. He felt his fingers were about 4 inches away from source itself. The patient thinks his exposure to both of his hands was about 10 Rem. However, the NRC, using a time of 20 seconds and the distance source to hands of 1 3/4" calculates that his exposure to the hands, particularly the first three fingers of each hand, was 33 R. The patient had a TLD dosimeter on his mid-chest anteriorly. The dosimeter read 40 millirem.

The patient has a life-time whole body cumulative dose of 1500 millirem. The patient has been a radiation worker for two years. He has received 80 hours of training in radiation safety. He has no history of previous radiation work or exposure to chemicals or other radiation sources. He had a single chest x-ray in his life and when he was in fourth grade he fractured his wrist and had multiple x-rays for that problem. He is a white male, in good health with no past history of serious illnesses or operations. Prior to his present work he was a student.

The patient denies any signs or symptoms associated with this exposure such as, erythema, nausea, vomiting, etc.

EXAMINATION:

Examination of the patient was unremarkable. The skin of both hands is of normal texture and feel with good blood supply. The nails are also normal in appearance. There is no hair on the dorsal aspect of either hand. He states he has never had any hair growth in this area. Examination of the

rest of the skin on the body is also unremarkable.

DIAGNOSIS:

Possible over-exposure from ionizing radiation, gamma, irridium-192 source, primarily to both hands. This exposure may be of regulatory significance but not medically significant.

TREATMENT:

1. Colored photographs of both hands.
2. Complete blood count and differential.
3. Karyotyping (this will be arranged with Dr. Alice Martin at Northwestern University Medical School in Chicago).
4. The significance of this exposure was thoroughly discussed with the patient and all of his questions were answered. He does not appear to have any undue anxiety about the exposure and appears to understand enough about radiation and radiation effects.

FOLLOW-UP - APRIL 30, 1984:

The blood count and karyotyping results were within normal limits.

CONCLUSION:

Medical examination of the patient reveals no evidence of over-exposure to ionizing radiation.

Roger B. Linnemann, M.D.

tmm

Northwestern Memorial Hospital

Superior Street and Fairbanks Court
Chicago, Illinois 60611
312 649-2000

April 30, 1984

Kenneth Gates
3045 Charing Cross
Ann Arbor, MI 48104

Report: Cytogenetic Analysis: Kenneth Gates , Completed April 13, 1984

Mr. Gates was referred for cytogenetic analysis because of accidental partial body exposure to an irriduim source (gamma) during performance of his duties for U.S. Testing Co. Inc. The purpose of cytogenetic analysis was to obtain a supplemental dose estimate of the whole body exposure equivalent.

As discussed with Mr. Gates, limitations of this type of test include:

1. dose estimates are not specific for the most recent exposure because of the persistance of lymphocytes in the circulation; rather they are cumulative;
2. accuracy of dose estimates increases with increased dose, in particular, exposures of below 10 rem. are difficult to detect
3. dose response curves vary for the type and rate of exposure, therefore accuracy of the cytogenetic dose estimate is a function of accuracy of information on the nature of the exposure.

Seven lymphocyte cultures each were initiated on March 30, 1984 from blood samples we obtained from Mr. Gates and from a control matched for age and sex. Six of each of the seven cultures were processed at 48 hours. Both sets of cultures were processed identically and concurrently. Slides were assigned random numbers and distributed for blind evaluation by 3 cytogeneticists Cells were selected sequentially under low power, and only rejected under oil immersion if the centromeric count was outside the range 45-47, or an artifact or overlap made analysis of all chromosomes impossible.

A total of 483 cells were analyzed from Mr. Gates; and 497 from the control. No dicentrics or rings were found in either individual, indicating a trivial whole body equivalent exposure.

Other aberrations were also scored (see Table). Although there was a slight increase in Mr. Gates for the frequency of a single chromatid breaks and gaps, this was not impressive.

Blood Source	No. of Analyzable Cells Scored	Dicentrics	Rings	Acentric Fragments	Single Chromatid Breaks	Iso Chromatid Breaks	Gaps
Gates	483	0	0	2	7	3	5
Control	497	0	0	2	4	3	1
	980	0	0	4	11	6	6

G-banded analysis revealed no constitutional chromosomal aberrations.

If we can be of further assistance, please contact us.

Sincerely yours,

Alice O. Martin

Alice O. Martin, Ph.D.
Director, Laboratory of Cytogenetics
Associate Professor of Obstetrics
and Gynecology

Joe Leigh Simpson, M.D.
Head, Section of Human Genetics
Professor of Obstetrics & Gynecology

AOM:JLS:mb

cc: Harding Brittain
Dr. Linneman

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

JUN 18 1984

Docket No. 30-020952
License No. 29-02477-09
EA 84-20

U.S. Testing Company, Inc.
ATTN: Mr. I. J. Fuchs
Executive Vice President
1415 Park Avenue
Hoboken, New Jersey 07030

Gentlemen:

This refers to letters dated May 4, 1984 and May 7, 1984 in response to the Notice of Violation and Proposed Imposition of Civil Penalties sent to you with our letter dated April 12, 1984. Our letter and Notice described violations identified during an NRC special safety inspection conducted on March 2-3, 1984. In your response, you questioned the validity of Violation I.A and you requested that the proposed civil penalty of $10,000 be mitigated to $4,000 because of your corrective actions.

In questioning the validity of Violation I.A, you stated in your response that the amount of exposure indicated in the NRC Notice is based on conjecture and is overly conservative. Although we consider our estimate appropriate, I wish to emphasize that the primary basis for establishing the civil penalty amount in this case is not the amount of exposure received by the individual but rather, (1) the fact that a substantial potential existed for a significant exposure in excess of regulatory limits because of an individual's failure to follow procedures, and (2) these events are similar to events which occurred in June 1983 which also involved a similar failure to follow procedures and which resulted in issuance of a civil penalty on October 7, 1983. As you are aware, it is not sufficient to have a good radiation safety program, good procedures to implement the program, and good training of personnel in the use of procedures. Rather, it is also necessary to maintain adequate control and oversight of the program to ensure adherence to procedures.

Therefore, after careful consideration of your response, we have concluded for the reasons given in the enclosed Order and Appendix that the violations did occur as stated, and although your corrective actions appear extensive, mitigation of the proposed penalty is not appropriate. Accordingly, we hereby serve the enclosed Order on U.S. Testing Company, Inc., imposing a civil penalty in the amount of Ten 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 enclosure will be placed in the NRC's Public Document Room.

Sincerely,

Richard C. DeYoung, Director
Office of Inspection and Enforcement

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

cc w/encl:
State of New Jersey

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
U.S. TESTING COMPANY, INC.	)	Docket No. 30-20952
Hoboken, New Jersey 07030	)	License No. 29-02477-09
		EA 84-20

ORDER IMPOSING MONETARY CIVIL PENALTIES

I

United States Testing Company, Inc., 1415 Park Avenue, Hoboken, New Jersey, 07030 (the "licensee") is the holder of License No. 29-02477-09 (the "license") issued by the Nuclear Regulatory Commission (the "Commission" or "NRC") which authorizes the licensee to possess and use radioactive materials in accordance with conditions specified therein.

II

An NRC special safety inspection of the licensee's activities under the license was conducted on March 2-3, 1984. As a result of the inspection, the NRC staff determined that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalties was served upon the licensee by letter dated April 12, 1984. The Notice states the nature of the violations, the provisions of the Commission requirements that the licensee had violated, and the amount of civil penalties for the violations. Responses dated May 4, 1984 and May 7, 1984 to the Notice of Violation and Proposed Imposition of Civil Penalties were received from the licensee.

III

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

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (42 U.S. 2282, PL 96-295), and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay civil penalties in the amount of Ten Thousand Dollars ($10,000) within thirty days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

V

The licensee may, within thirty days of the date of this Order, request a hearing. A request for a hearing shall be addressed to the Director, Office of Inspection and Enforcement. A copy of the hearing request shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555. If a hearing

is requested, the Commission will issue an Order designating the time and place of hearing. 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.

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

(a) whether the licensee violated NRC requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties; and

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

FOR THE NUCLEAR REGULATORY COMMISSION

Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 18th day of June 1984

Appendix

Evaluation and Conclusion

The violations and associated civil penalties identified in Section I of the NRC's Notice of Violation and Proposed Imposition of Civil Penalties dated April 12, 1984 are restated. Further, the licensee's response to the Notice is summarized and the NRC's evaluation and conclusion regarding the licensee's response is provided. The licensee's response was provided in two letters dated May 4, 1984 and May 7, 1984 respectively, from Mr. Carl B. Yoder, Radiation Safety Officer, United States Testing Company, Inc., to the Director, Office of Inspection and Enforcement.

Restatement of Violation

A. 10 CFR 20.101(a) prohibits the use of licensed material in such a manner as to cause any individual in a restricted area to receive in any calendar quarter from radioactive materials or other sources of radiation a total occupational radiation dose in excess of 18.75 rem to the hands.

Contrary to the above, during the first calendar quarter of 1984, specifically on March 1, 1984, an employee of U.S. Testing Company, Inc., while uncoupling and recoupling the guide tube containing a 24-curie iridium-192 source that had disconnected from a U.S. Testing Company, Inc. radiography device, received a radiation exposure to one of his hands calculated to be about 33 rem.

B. 10 CFR Part 20.201(b) requires that each licensee make such surveys as (1) are necessary to comply with regulations in 10 CFR 20 and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As defined in 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above, on March 1, 1984, an adequate survey was not performed prior to uncoupling a source guide tube containing a disconnected 24-curie iridium-192 source from its radiography device, in that the radiation levels in the area of the source guide tube and coupling were not determined and the exposure that could be received by the individual was not estimated and shown to be less than the 18.75 rem limit to the extremities.

C. Condition 17 of License No. 29-02477-09 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in applications dated November 21, 1979 and January 29, 1982, and letters dated December 18, 1979, November 6, 1980, November 17, 1980, January 25, 1983, July 1, 1983, July 27, 1983, September 9, 1983, September 12, 1983 and a letter dated December 1, 1983 with attachments.

The December 1, 1983 letter includes the U.S. Testing Company, Inc., Emergency Procedures. Section IV, Part B, Item 6 of these Emergency Procedures requires that the Radiation Protection Officer be notified if a radiography source cannot be cranked back into the fully shielded position for any reason, and that the Radiation Protection Officer determine the course of action to be followed.

Contrary to the above, on March 1, 1984, the Radiation Protection Officer was not immediately notified when it was determined that a source could not be cranked back into a fully shielded position. The radiographer uncoupled the source guide tube and reconnected it prior to notifying the Radiation Protection Officer.

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

(Cumulative Civil Penalties of $10,000 assessed equally among the violations.)

Summary of Licensee Response

The licensee admits Violations B and C, but questions the validity of Violation A. With regard to Violation A, the licensee does not deny that some radiation exposure occurred, but contends that the radiation exposure stated in the NRC's Notice of Violation, which is a value calculated by the NRC, is based on conjecture and is without specific knowledge of the distance between the radioactive source and the individual's hand. The licensee maintains that the distance used by the NRC in the calculation is overly conservative, and use of a distance one-half inch greater would result in a calculated value less than the regulatory limit. The licensee further indicates that the medical examination of the individual reveals no radiation overexposure.

The licensee further states that the violations did not occur because of any deficiencies in the Operating and Emergency Procedures, but rather because an individual radiographer, when confronted with an emergency situation for the first time, failed to overcome his natural tendency to get out of a troublesome situation by following his instincts. The licensee indicates that it has embarked on an extensive corrective action program directed toward behavioral modification to suppress instinctive, normal reaction to an emergency situation, and to instill an automatic total compliance with written procedures. These actions have included face-to-face meetings between either the Radiation Safety Officer or the Emergency Safety Officer and each company radiographer, and the licensee has committed to issuance of eye-catching bulletins and flyers to each radiographer emphasizing the need to adhere to procedures.

The licensee maintains that its corrective actions will reinforce a total commitment to the procedures, and in consideration of this commitment, the licensee requests that the proposed civil penalty of $10,000 for the violations related to this incident be reduced to the normal civil penalty for Severity Level III violations, namely $4,000.

NRC Evaluation of Licensee Response

The NRC staff acknowledges that there is no specific knowledge of the actual distance that existed between the radioactive source and the individual's hand. The licensee is correct in stating that the calculated exposure would be less than regulatory limits if a distance of one-half inch more were assumed. However, the calculated exposure would be significantly higher if a distance of one-half inch less were assumed. The NRC staff continues to believe that based on interviews, observations and measurements taken during the reenactment of the incident, NRC's method of calculating the overexposure is the most appropriate method and that an overexposure did occur. In any case, the amount of exposure is not the central issue in this case. Even if the calculated value was within regulatory limits, the violations would still be categorized in the aggregate as a Severity Level III problem because a substantial potential existed for a radiation exposure in excess of limits, regardless of whether an excessive exposure actually occurred. See 10 CFR Part 2, Appendix C, Supplement IV, Section C.4. The licensee's medical consultant, while indicating the exposure was not medically significant, acknowledged that it may be of regulatory significance.

The NRC staff agrees with the licensee that the violations did not occur because of deficiencies in the procedures, but rather because of an individual radiographer's failure to adhere to emergency procedures. This failure is of significant concern because of a previous failure to adhere to emergency procedures during a source disconnect which occurred in June 1983. During that event, an individual also received an exposure in excess of regulatory limits. The previous violations were identified in the NRC's Notice of Violation and Proposed Imposition of Civil Penalties dated October 7, 1983. The actions taken by the licensee in response to the previous violations were not sufficient to ensure adherence to procedures. Therefore, although the current corrective actions appear extensive, the civil penalties have not been mitigated to emphasize that such corrective actions must be thorough and long lasting.

NRC Conclusion

The violations did occur as originally stated. The information provided in the licensee's response does not provide an adequate basis for mitigation of the civil penalty.

II.B. MATERIAL LICENSEES, SEVERITY LEVEL III VIOLATIONS,

NO CIVIL PENALTY

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

SEP 20 1984

Docket No. 030-12538
License No. 50-17314-01
EA 84-83

Arctic Pipe Inspection, Inc.
ATTN: Mr. Royce G. Roberts
President
P. O. Box 1296
Kenai, Alaska 99611

Gentlemen:

Subject: NOTICE OF VIOLATION (NRC INSPECTION NO. 84-01)

This refers to the routine safety inspection conducted by Mr. R. D. Thomas of this office on July 25-26, 1984, of activities authorized by NRC License No. 50-17314-01 and to the discussion of our findings held by Mr. Thomas with you and other members of your staff at the conclusion of the inspection. The findings of this inspection were also discussed during an enforcement conference which was held at the NRC Region V offices on August 24, 1984, between you and Mr. Bobby Faulkenberry and other members of the NRC staff.

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Commission's rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

Based on the results of this inspection, it appears that certain of your activities were not conducted in full compliance with NRC requirements, as set forth in the enclosed Notice of Violation. These items have been categorized into severity levels as described in the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised 49 FR 8583 (March 8, 1984).

Item A in the Notice of Violation has been categorized as a Severity Level III violation. Normally, a civil penalty is proposed for a Severity Level III violation. However, we have exercised our discretion, after our discussion with you during the enforcement conference and after consultation with the Director of the Office of Inspection and Enforcement, and have decided not to propose a civil penalty in this case. In making this decision, we have considered two facts: (1) two of the violations were administrative in nature and did not present an immediate safety hazard and, (2) you have taken quick corrective action to dispose of the unlabeled sealed source which was located

in the storage yard. The other three violations described in the enclosed Notice have been classified as either Severity Level IV or Severity Level V. Nonetheless, we wish to emphasize that failure in the future to maintain proper labels on licensed materials and to maintain proper control over licensed materials may result in escalated e orcement action.

You are required to respond to the enclosed Notice, and in preparing your response, you should follow the instructions specified in the Notice. In your response, you should indicate the specific actions taken and planned to improve control of licensed materials. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

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

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

Sincerely,

John B. Martin
Regional Administrator

Enclosure:
Notice of Violation

NOTICE OF VIOLATION

Arctic Pipe Inspection, Inc.
P. O. Box 1296
Kenai, Alaska 99611

Docket No. 030-12538
License No. 50-17314-01
EA 84-83

As a result of the inspection conducted on July 25-26, 1984, and in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), the following violations were identified:

A. 10 CFR 20.207(a) requires that licensed materials stored in an unrestricted area be secured against unauthorized removal from the place of storage. As defined in 10 CFR 20.3(a)(17), an unrestricted area is any area which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above requirement, at the time of the inspection, a scrap tube wall caliper gauging device, which contained approximately 1 curie of cesium-137, was located in an outside storage yard, an unrestricted area, and was not secured against unauthorized removal in that the gate was open and access was not controlled by the licensee.

This is a Severity Level III Violation (Supplement IV)

B. 10 CFR 20.203(f)(1) and (2) require that each container of licensed material shall bear a durable, clearly visible label identifying the radioactive contents. The label required shall bear the radiation caution symbol and the words, "Caution, Radioactive Material," or "Danger, Radioactive Material."

Contrary to the above requirement, at the time of the inspection, the housing which contained the approximately 1 curie cesium-137 sealed source mentioned in paragraph A above, was unlabeled.

This is a Severity Level IV Violation (Supplement IV)

C. License Condition 12 states that licensed material shall be used by, or under the supervision of, Royce G. Roberts or Patrick D. Daniels.

Contrary to this requirement, at the time of the inspection, a company employee who was not named on the license had used licensed material consisting of a tube wall caliper gauging device at the Industrial Plant Site, North Slope, Alaska without the supervision of Royce G. Roberts or Patrick D. Daniels.

This is a Severity Level IV Violation (Supplement VI)

D. License Condition 15 states that the licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory, and shall include the quantities and kinds of byproduct material, location of sealed sources, and the date of the inventory.

Contrary to the above requirement, at the time of the inspection, the licensee had not maintained an inventory record of sealed sources since September 1980.

This is a Severity Level V Violation (Supplement VI)

Pursuant to the provisions of 10 CFR 2.201, Arctic Pipe Inspection, Inc. is hereby required to submit to this office within thirty 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 which have been taken to avoid the results achieved; (4) the corrective steps which will be taken to avoid further violations; (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown.

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

JUL 1984

Docket Nos. 30-14472
70-00303
License Nos. 37-00602-03
SNM-281
EA 84-71

Carnegie-Mellon University
ATTN: Mr. Fred Rogers
Vice President for Business Affairs
5000 Forbes Avenue
Pittsburgh, Pennsylvania 15213

Gentlemen:

SUBJECT: NOTICE OF VIOLATION (NRC INSPECTION 84-01)

This refers to the NRC safety inspection conducted on May 23-25, 1984 of activities authorized by NRC License Nos. 37-00602-03 and SNM-281. During the inspection, fourteen violations of NRC requirements were identified. The report of the inspection was forwarded to you on June 25, 1984. On July 5, 1984, we held an enforcement conference with you and other members of your staff during which the violations, their causes, and your corrective actions were discussed.

The violations, which are described in the enclosed Notice, are of significant concern because they collectively represent a breakdown in management oversight and control of the radiation safety program. We are particularly concerned that the Radiation Safety Officer and the Radiation Safety Committee were not effective in assuring adherence to NRC requirements and safe performance of licensed activities. Accordingly, improvements are required in the implementation of your radiation safety program.

The fourteen violations have been categorized in the aggregate as a Severity Level III violation in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984). The base civil penalty for a Severity Level III problem is normally $2,000. However, because of Carnegie-Mellon University's good past performance and because the corrective actions taken were prompt and extensive, we have decided not to issue a civil penalty. However, the NRC will examine closely the effectiveness of the corrective actions, and similar violations in the future may result in additional enforcement action.

You are required to respond to the enclosed Notice and, in preparing your response, you should follow the instructions specified in the Notice. In your response, you should also describe the specific actions, as delineated at the enforcement conference, that you have taken or planned to improve control and oversight of the radiation safety program to assure the program is properly implemented, and deficiencies are promptly identified and corrected.

Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

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

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

Sincerely,

James M. Allan

Thomas E. Murley
Regional Administrator

Enclosure:
Notice of Violation

cc:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
Commonwealth of Pennsylvania

NOTICE OF VIOLATION

Carnegie-Mellon University
5000 Forbes Avenue
Pittsburgh, Pennsylvania 15213

Docket Nos. 30-14472;
70-00303
License Nos. 37-00602-03;
SNM-281
EA 84-71

An NRC inspection of activities authorized under NRC License Nos. 37-00602-03 and SNM-281 was conducted on May 23-25, 1984. During the inspection, fourteen violations of NRC requirements were identified. Collectively, these violations represent inadequate management control and oversight of the radiation safety program and have been categorized in the aggregate as a Severity Level III problem. Normally, a civil penalty is proposed for a Severity Level III violation or problem. However, a civil penalty is not proposed because of the licensee's good past performance and because the corrective actions taken after the inspection were prompt and extensive.

In accordance with the revised NRC Enforcement Policy, 10 CFR Part 2, Appendix C, published in the Federal Register (49 FR 8583) on March 8, 1984, the particular violations are set forth below:

A. 10 CFR 20.207(a) requires that licensed materials stored in an unrestricted area be secured against unauthorized removal from the place of storage. 10 CFR 20.207(b) requires that material not in an unrestricted area and not in storage be under constant surveillance and immediate control of the licensee. As defined in 10 CFR 20.3(a)(17), an unrestricted area is any area access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

Contrary to the above, on May 23-25, 1984, laboratories containing millicurie quantities of radioactive material, specifically, Rooms 206 A, 206 B, 206 C, and 638 of the Mellon Institute, were unlocked and unattended and access was not controlled.

B. Condition 18 of License No. 37-00602-03 requires that licensed material be possessed and used in accordance with statements, representations and procedures contained in an application dated July 24, 1979, and letters dated April 3, 1980 and June 7, 1982.

1. Item No. 11 of the attachment to the letter dated April 3, 1980, requires that the Radiation Safety Committee meet at least four times a year.

Contrary to the above, the Radiation Safety Committee did not meet during 1983.

2. Item Nos. 6.a. and 7 of the application dated July 24, 1979, require that the Chairman of the Radiation Safety Committee and the Radiation Safety Officer be the individuals named in the application dated July 24, 1979. License Condition 12 also specifies the name of the individual who is the Chairman of the Radiation Safety Committee.

   Contrary to the above, as of May 23, 1984, the Chairman of the Radiation Safety Committee and the Radiation Safety Officer are no longer the individuals named in the application and in License Condition 12, and no application had been made to amend the license to reflect the names of the new individuals.

3. Item No. 15 of the application dated July 24, 1979, requires that each individual user obtain formal authorization from the Radiation Safety Committee to use radioactive materials.

   Contrary to the above, as of May 23, 1984, licensed radioactive material was being used by two individuals who were not formally authorized by the Radiation Safety Committee to use radioactive materials.

4. Item No. 11(f) of the attachment to the letter dated April 3, 1980, requires that all users of millicurie quantities of high-energy-beta emitters wear finger badges.

   Contrary to the above, as of May 23, 1984, finger badges were not being worn by one user of millicurie quantities of phosphorous-32, a high-energy-beta emitter.

5. Item No. 5 of the attachment to the letter dated April 3, 1980, requires that all housekeeping personnel, who enter areas to which access is restricted because of the presence of radioactive material, know and understand the rules which have been established for their safety.

   Contrary to the above, as of May 23, 1984, no members of the janitorial staff, who enter areas to which access is restricted because of the presence of radioactive material, had received instruction in the rules established for their safety.

6. Item No. 3 of the attachment to the letter dated June 7, 1982, requires that surveys of the radioactive waste storage room and adjacent areas be surveyed and the results recorded at least weekly. Item No. 11(d) of the letter dated April 3, 1980, requires that all laboratories in which radioactive material is used be surveyed and the survey results be recorded at least monthly.

   Contrary to the above,

   a. Prior to February, 1984, survey results of the radioactive waste storage room and adjacent areas were not recorded weekly, but rather monthly.

b. During February and March 1984, surveys of the radioactive waste storage room, adjacent areas, and all laboratories were not performed.

7. Item No. 1 of the attachment to the letter dated April 3, 1980, requires that calibration of radiation survey instruments be performed annually.

Contrary to the above, as of May 23, 1984, no calibration records were available for two of the instruments in use in laboratories where radioactive material was used, and the latest calibration record for a third instrument was 1.5 years old.

8. Item No. 8 of the attachment to the letter dated April 3, 1980, requires that radioactive waste be taken to the waste storage room whenever the waste containers become full.

Contrary to the above, as of May 23, 1984, many laboratories contained several full containers of radioactive waste.

9. Item No. 15 of the application dated July 24, 1979, requires that rooms and containers, in which radioactive material is used or stored, bear the appropriate signs or labels in accordance with 10 CFR 20.203 and that radioactive waste only be placed in designated containers.

Contrary to the above, as of May 23, 1984, several laboratories containing licensed radioactive material were improperly posted or not posted in accordance with 10 CFR 20.203(e) and radioactive waste was placed in undesignated waste containers. Specifically,

a. In Room 251 a freezer containing millicurie quantities of S-35 was not labeled in accordance with 10 CFR 20.203(f);

b. radioactive waste was stored in undesignated waste containers; and;

c. bottles and bags of radioactive waste were not labeled as to contents or amount of activity in accordance with 10 CFR 20.203(f)

10. Item No. 15 of the application dated July 24, 1979, requires that there be no eating, drinking, or smoking in laboratories where radioactive material is used and that food or drink never be stored in a refrigerator used for storing radioactive materials.

Contrary to the above, as of May 23, 1984, evidence of eating, drinking, and smoking was observed in rooms where licensed radioactive materials were being used or stored, and drink was found in a refrigerator containing licensed radioactive material.

11. Item No. 15 of the application dated July 24, 1979, requires that a running inventory be maintained of all licensed radioactive materials in the licensee's possession.

    Contrary to the above, as of May 23, 1984, a running inventory was not maintained of all licensed radioactive materials in the licensee's possession.

12. Item No. 15 of the application dated July 24, 1979, requires that survey records be maintained for receipt of all packages of licensed radioactive material.

    Contrary to the above, as of May 23, 1984, package survey records were not maintained for packages of radioactive materials received between 1981 through April, 1984.

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

    Contrary to the above, on May 23, 1984, none of the documents or notices were posted.

Collectively, the violations have been categorized in the aggregate at Severity Level III (Supplements IV and VI).

Pursuant to the provisions of 10 CFR 2.201, Carnegie-Mellon University is hereby required to submit to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including for each alleged violation (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps that will be taken and the results achieved; (4) the corrective steps that will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Allan

Thomas E. Murley
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 25th day of July 1984

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

JUL 17 1984

General License
EA 84-69

City of Kalamazoo, Michigan
ATTN: Mr. Richard G. Simms
Superintendent
Wastewater Treatment Plant
1415 North Harrison
Kalamazoo, MI 49007-4796

Gentlemen:

This refers to the special inspection conducted by Messrs. D. J. Sreniawski and W. P. Reichhold of this office on March 23, 27, and 28, 1984, of activities authorized by 10 CFR Part 31 "General Domestic Licenses for Byproduct Material," and to the discussion of our findings with you at the exit meeting on March 28, 1984. The special inspection was in response to a March 22, 1984 telephone notification from the Ohmart Corporation, a gauge manufacturer, that a cesium-137 sealed source was missing from a gauge that you returned to Ohmart on February 23, 1984.

The inspection included a selective review of records, interviews with personnel, independent measurements, and observation of the source recovery operation. During this inspection it was found that certain of your activities were not conducted in full compliance with NRC requirements. The violations described in the attached Notice of Violation include the removal, by unauthorized individuals, of an Ohmart Corporation Model CS-3 gauge device containing a 700 millicurie cesium-137 source.

This matter has been categorized as a Severity Level III problem in accordance with the General Statement of Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C. Normally, a civil penalty is proposed for Severity Level III violations. However, we have exercised our discretion after reviewing your corrective action and after consultation with the Director, Office of Inspection and Enforcement, and have decided not to propose a civil penalty in this case. In making this decision, we have taken into consideration the fact that, upon learning that the cesium-137 source had fallen from the gauge into a floor drain in the maintenance building, you immediately maintained total access control of that area until the source could be recovered from the floor drain by your consultant, and that you sent those employees who might have been near the cesium-137 source for chromosome studies in order to evaluate the significance of any possible radiation exposure.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

You have indicated you have not used the gauge since 1974 and have no plans to purchase another gauge containing licensed byproduct material. In addition, we have no further questions about this matter at this time. Therefore, no response to this letter is required.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractors) believe to be exempt from disclosure under 10 CFR 9.5(a)(4), it is necessary that you (a) notify this office by telephone within ten (10) days from the date of this letter of your intention to file a request for withholding; and (b) submit within twenty-five (25) days from the date of this letter a written application to this office to withhold such information. If your receipt of this letter has been delayed such that less than seven (7) days are available for your review, please notify this office promptly so that a new due date may be established. Consistent with Section 2.790(b)(1), any such application must be accompanied by an affidavit executed by the owner of the information which identifies the document or part sought to be withheld, and which contains a full statement of the reasons which are the bases for the claim that the information should be withheld from public disclosure. This section further requires the statement to address with specificity the considerations listed in 10 CFR 2.790(b)(4). The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified periods noted above, a copy of this letter and the enclosed inspection report will be placed in the Public Document Room.

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

Sincerely,

Original signed by
James G. Keppler

James G. Keppler
Regional Administrator

Enclosures:
1. Notice of Violation
2. Inspection Report No. 84-01

Distribution
PDR
SECY
CA
RCDeYoung, IE
JTaylor, IE
JAAxelrad, IE
EFlack, IE
JKeppler, RIII
JLieberman, ELD
VStello, DED/ROGR
FIngram, PA
VMiller, NMSS
JCrooks, AEOD
BHayes, OI
GMessenger, OIA
DNussbaumer, OSP
RECunningham, NMSS
Enforcement Coordinators
RI, RII, RIII, RIV, RV
IE:ES File
IE:EA File
EDO Rdg File
DCS

NOTICE OF VIOLATION

City of Kalamazoo, Michigan
Wastewater Treatment Plant
1415 North Harrison
Kalamazoo, MI 49007-4796

General License
EA 84-69

As a result of the inspection conducted on March 23, 27, and 28, 1984, and in accordance with the General Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, and 10 CFR 2.201, the following violations were identified:

A. 10 CFR 31.5(c)(3)(i) and (ii) require that any person who acquires, receives, possesses, uses, or transfers byproduct material in a device pursuant to a general license shall assure that the removal from installation involving the radioactive material, its shielding, or containment is performed in accordance with the instructions provided by the labels, or by a person holding a specific license pursuant to 10 CFR Parts 30 and 32 or from an Agreement State to perform such activities. The labels require that installation, dismantling, relocation, maintenance, or tests shall be performed by persons specifically licensed by NRC or an Agreement State.

Contrary to the above, at some time between January 10 and February 10, 1984 the gauge was removed from a wastewater process line by two individuals who were not authorized by NRC or an Agreement State to perform such activities.

B. 10 CFR 31.5(c)(2) requires that any person who acquires, receives, possesses, uses, or transfers byproduct material in a device pursuant to a general license shall assure that the device is tested for leakage of radioactive material at such intervals as are specified in the label affixed to the device.

Contrary to the above, from 1974 until 1984, an Ohmart Corporation Model CS-3 gauge containing a nominal 700 millicurie cesium-137 sealed source was not leak tested at the intervals specified on the label.

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

No reply to this Notice of Violation is required.

FOR THE NUCLEAR REGULATORY COMMISSION

James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 17th day of July 1984

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

September 25, 1984

License: 40-15027-01
EA 84-91

Laboratory of Clinical Medicine
ATTN: W. A. Boade, M.D.
1212 South Euclid
Sioux Falls, South Dakota 57105

Gentlemen:

This refers to the special inspections conducted by Mr. R. C. Brown, accompanied by Mr. R. D. Murphy, and by Mr. J. E. Whitten of this office on November 29-December 2, 1982, and January 18-19, 1984. The results of the inspections are enclosed in NRC Inspection Reports, 30-8451/82-01 and 30-8451/84-01. The inspections consisted of selective examinations of procedures and representative records, interviews of personnel, independent measurements, and observations by the inspectors. This also refers to the Enforcement Conference held at the Region IV office on July 26, 1983, between Dr. W. A. Boade and Mr. R. L. Bangart of this office to discuss the findings of the NRC inspection. The enclosed NRC Inspection Report 30-8451/83-01 documents this meeting.

The violation described in the attached Notice of Violation, involving control of licensed material, is classified as a Severity Level III violation in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984). Normally a civil penalty is proposed for a Severity Level III violation. However, under the circumstances of this case including the age of the violation and the corrective actions you have taken which included: (1) limiting the amount of radiopharmaceuticals dispensed, (2) issuing only unit doses with accountability seals, (3) logging all waste material and instituting an audit system to review material use and disposal, (4) installing dose calibrators in all mobile vehicles, (5) establishing closer locations to reduce work load and prevent overnight trips, and (6) conducting training of personnel, and after consultation with the Director, Office of Inspection and Enforcement, I have exercised my discretion under the NRC Enforcement Policy and have decided not to propose a civil penalty. No response to the enclosed Notice of Violation is required since during the January 18-19, 1984 inspection it was confirmed that these corrective actions were implemented.

I do wish to emphasize the seriousness with which the Commission views the failure to properly control the administration of radioactive material to medical patients which resulted in administrations in excess of the prescribed dosages. Although it was not apparent that there was direct management involvement, the violation did demonstrate a definite weakness in your overall management controls.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you believe to be exempt from disclosure under 10 CFR 9.5(a)(4), it is necessary that you (a) notify this office by telephone within 10 days from the date of this letter of your intention to file a request for withholding; and (b) submit within 25 days from the date of this letter a written application to this office to withhold such information. If your receipt of this letter has been delayed such that less than 7 days are available for your review, please notify this office promptly so that a new due date may be established. Consistent with Section 2.790(b)(1), any such application must be accompanied by an affidavit executed by the owner of the information which identifies the document or part sought to be withheld, and which contains a full statement of the reasons on the basis which it is claimed that the information should be withheld from public disclosure. This section further requires the statement to address with specificity the considerations listed in 10 CFR 2.790(b)(4). The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified periods noted above, the report will be placed in the Public Document Room.

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

Sincerely,

John T. Collins
Regional Administrator

Enclosures:
1. Appendix A - Notice of Violation
2. Appendix B - NRC Inspection Report 30-8451/82-01
3. Appendix C - NRC Inspection Report 30-8451/83-01
4. Appendix D - NRC Inspection Report 30-8451/84-01

APPENDIX A

NOTICE OF VIOLATION

Laboratory of Clinical Medicine
1212 South Euclid
Sioux Falls, South Dakota

Docket: 030-8451
License: 40-15027-01
EA 84-91

A special unannounced inspection of activities authorized under NRC License No. 40-15027-01 was conducted on November 29-December 2, 1982 as a result of allegations received in the NRC Region IV office on November 12, 1982. The inspection was a general review of records and procedures and the following allegations: (1) improper training and qualification of laboratory technicians; (2) failure of company to provide workers with exposure records; (3) failure to perform surveys of laboratory and/or general work area; (4) failure to perform Mo-99 breakthrough tests; (5) issuance to personnel of more than one film badge and failure to properly collect badges; (6) failure to administer doses in accordance with package inserts; (7) instruction to persorrel not to turn in radiation badges if any significant exposure occurred; and (8) fabrication of survey records. In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised, 49 FR 9987 (March 9, 1982), the following violation was identified:

License Condition 12 states that licensed material shall be used by NRC authorized users. 10 CFR 30.51(a) requires that each person who receives byproduct material shall keep records showing the receipt, transfer, and disposal of such byproduct material.

Contrary to these requirements, technicians who were not approved NRC-authorized users administered radioactive material that exceeded the doses prescribed by the NRC approved authorized users on several occasions during the period October 1979 to February 1980. Also, records were not available showing disposal dates of byproduct material during the period July 1981 to December 1982.

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

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

AUG 2 3 1984

Norfolk Dredging Company
ATTN: Mr. Richard J. Voigtsberger
Project Engineer
P. O. Box 539
Norfolk, VA 23501

Gentlemen:

SUBJECT: NOTICE OF VIOLATION: EA 84-64
USE OF LICENSABLE MATERIAL WITHOUT A LICENSE
(REFERENCE: REPORT NO. 45-21041-01/83-01)

This refers to the routine safety inspection conducted by Mr. L. A. Franklin of our staff on July 27, 1983, of activities authorized by NRC License No. 47-17742-01. Our preliminary findings were discussed with you at the conclusion of the inspection. Because one of the apparent violations of our regulations involved the receipt and use of licensable material prior to receipt of your license, this matter was investigated by the NRC Office of Investigations. These matters were discussed further in a telephone enforcement conference on June 7, 1984 between Mr. Russell J. Thorne, Executive Vice President, and yourself, and Mr. J. Philip Stohr, Acting Director, Radiation and Safeguards Division, and other members of the NRC Region II staff.

The inspection was an examination of the activities conducted under your license as they related to radiation safety and compliance with the Commission's rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

During this inspection, certain of your activities were found not to have been conducted in full compliance with NRC requirements. Item 1 described in the enclosed Notice of Violation, involving the receipt and use of licensable material without a license, is classified as a Severity Level III violation, in accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C. Although a civil penalty could be issued for a violation of this severity, no penalty is being proposed because your actions resulted in part from the reliance on the direction to go ahead with the acquisition and use of the material by the U.S. Army Corps of Engineers, an agency of the Federal government, and because the safety hazard associated with the use of the radioactive material was minimal. Future violations of this sort may result in increased enforcement sanctions.

You are required to respond to the enclosed Notice and should follow the instructions specified therein when preparing your response. Your written reply to this

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

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

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

Sincerely,

James P O'Reilly

James P. O'Reilly
Regional Administrator

Enclosure:
Notice of Violation

NOTICE OF VIOLATION

Norfolk Dredging Company
Norfolk, VA 23501

License No. 45-21041-01
EA 84-64

A routine NRC safety materials license inspection of Norfolk Dredging Company was performed on July 27, 1983. The inspection revealed that licensable material was received by Norfolk Dredging Company on April 27, 1982, prior to the issuance of a materials license on January 11, 1983. In accordance with the General Policy and Procedure for NRC Enforcement Actions, 10 CFR Part 2, Appendix C, and 10 CFR 2.201, the particular violations are set forth below:

1. Section 81 of the Act requires that no person may transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, own, possess, import, or export any byproduct material, except to the extent authorized by this section, section 82 or section 84.

   10 CFR 30.3 requires that no person possess or use byproduct material except as authorized by a specific or general license issued pursuant to Title 10, Chapter 1, Code of Federal Regulations.

   Contrary to the above, from April 27, 1982 to January 11, 1983 Norfolk Dredging Company possessed and used a source containing 319 millicuries of cesium-137, a byproduct material, without a valid license.

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

2. 10 CFR 19.11(1)(a) and (b) require that current copies of Part 19, Part 20, the license, license conditions or documents incorporated into the license by reference, license amendments and operating procedures be posted, or if posting of a document is not practicable, that a notice describing these documents and where they may be examined, be posted.

   Contrary to the above, on July 27, 1983 neither the specified documents nor a notice describing these documents were posted.

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

Pursuant to the provisions of 10 CFR 2.201, you are hereby required to submit to this office within thirty days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violations; (2) the reasons for the violations if admitted; (3) the corrective steps which have been taken and the results achieved; (4) 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 your response time for good cause shown.

FOR THE NUCLEAR REGULATORY COMMISSION

James P. O'Reilly
Regional Administrator

Dated at Atlanta, Georgia
this 23rd day of August 1984

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

AUG 2 3 1984

U.S. Army Corps of Engineers
ATTN: District Engineer
Norfolk District
803 Front Street
Norfolk, Virginia 23510

Gentlemen:

SUBJECT: UNAUTHORIZED USE OF NRC LICENSABLE MATERIAL BY A U.S. ARMY CORPS OF ENGINEERS CONTRACTOR

This refers to our enclosed Notice of Violation to Norfolk Dredging Company concerning their unauthorized use of 319 millicuries of cesium-137 under the direction of your office.

It appears that your contractor encountered a lengthy delay in obtaining an NRC license for an IHC Holland Density Transducer used on their dredge, and they proceeded without a license because they perceived that they were under pressure from your office to fulfill their contract. Although we appreciate the importance of your efforts in restoring the shell-fishing industry to the James River estuary, we cannot condone disregarding our safety requirements.

Fortunately, the safety significance of these actions was minimal, and in view of the circumstances, we are not imposing any escalated enforcement sanctions for this violation.

We recognize that an unanticipated licensing delay resulted because of difficulties in obtaining the proper quality assurance documents (from Dutch and French sources) normally required for our sealed source and device review prior to licensing. Such delays are not unusual for imported devices which have not been previously reviewed and approved by NRC or an Agreement State. Appropriate time must be allowed for obtaining proper NRC licenses prior to accepting delivery of radioactive material. Unanticipated delay in obtaining a license is not a valid excuse for disregarding NRC requirements. We hope you will instruct your personnel that they should not authorize use of material without an NRC license nor condone evasion of NRC licensing requirements.

Should you have any questions concerning this matter, NRC regulations, or license approval on a priority basis, please contact me personally or J. Philip Stohr of my staff at (404) 221-5571.

Sincerely,

James P. O'Reilly

James P. O'Reilly
Regional Administrator

Enclosure:
Letter w/encl to Norfolk Dredging Co.

cc w/encl: Corps Coordinator (D.C.)

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

September 14, 1984

Docket Nos. 40-00672; 30-19394
License Nos. SMB-179; 20-02217-05
EA No. 84-86

Nuclear Metals, Inc.
ATTN: Mr. W. B. Tuffin
President
2229 Main Street
Concord, Massachusetts 01742

Gentlemen:

Subject: NOTICE OF VIOLATION (Inspection No. 84-01)

This refers to the NRC safety inspection conducted on June 16-19, 1984, of activities authorized by NRC License Nos. SMB-179 and 20-02217-05. The report of this inspection was forwarded to you on August 9, 1984. The inspection was conducted to review the circumstances associated with a violation of NRC requirements involving a radiation exposure in excess of regulatory limits to a health physics technician. The exposure was reported to the NRC on May 24, 1984.

During the inspection, two additional violations of NRC requirements were identified. The three violations, their causes, and your corrective actions were discussed at an enforcement conference held with Mr. A. Gilman and other members of your staff with Mr. J. Allan and other members of my staff at our Region I office on August 21, 1984.

The violation involving the exposure of a health physics technician in excess of the regulatory limit has been classified as a Severity Level III violation in accordance with Section C.1 of Supplement IV of the NRC Enforcement Policy (10 CFR 2, Appendix C), as revised, 49 FR 8583 (March 8, 1984). As indicated in Paragraph IV.B of the revised Policy, civil penalties are considered for Severity Level III violations. In this case, we have exercised our discretion under the Policy and have decided not to issue a civil penalty. In making this decision, we have considered the facts that (1) the exposure to the technician was only slightly in excess of the regulatory limit; (2) the cause of the exposure does not appear programmatic in nature; and (3) significant improvements have been made in your radiation safety program within the past year.

Nonetheless, we emphasize the need for continued improvement to prevent such exposures, and also to prevent recurrence of the other two violations which are classified as Severity Level IV violations.

The three violations are described in the enclosed Notice. With regard to Violation C, we reiterate, as we emphasized at the enforcement conference, that it is a condition of your license that individuals monitor themselves for contamination upon exiting the source material processing area. The failure of certain individuals to perform self monitoring cannot and will not be tolerated. Accordingly, we emphasize that any similar violations in the future may result in additional enforcement action.

You are required to respond to the enclosed Notice and in preparing your response, you should follow the instructions specified in the Notice. We will examine closely your response, and as indicated, your response and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

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

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

Sincerely,

James M. Allan

Thomas E. Murley
Regional Administrator

Enclosure: Notice of Violation

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

NOTICE OF VIOLATION

Nuclear Metals, Inc.
2229 Main Street
Concord, Massachusetts 01742

Docket Nos. 40-00672; 30-19394
License Nos. SMB-179; 20-02217-05
EA No. 84-86

An NRC inspection of activities authorized under NRC License Nos. SMB-179 and 20-02217-05 was conducted at Nuclear Metals, Inc. on June 16-19, 1984. The inspection was conducted to review the circumstances associated with a violation of NRC requirements involving a radiation exposure to a health physics technician in excess of regulatory limits. The exposure was reported to the NRC on May 24, 1984. During the inspection, two other violations of NRC requirements were identified.

In accordance with the NRC Enforcement Policy, 10 CFR Part 2, Appendix C, as revised, 49 FR 8583 (March 8, 1984), the violations are set forth below.

A. 10 CFR 20.101(a) prohibits the use of licensed material in such a manner as to cause any individual in a restricted area to receive from radioactive materials or other sources of radiation a total occupational radiation exposure of 18.75 rem to the hands in any calendar quarter.

Contrary to the above, during the second quarter of 1984, a health physics technician performing special surveys in the foundry, a restricted area, received an occupational radiation exposure of 21.5 rem to the left hand.

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

B. 10 CFR 71.5(a) requires that no licensee deliver any licensed material to a carrier for transport without complying with the applicable requirements of the regulations of the Department of Transportation in 49 CFR Parts 170-189.

49 CFR 173.443(c) requires that removable contamination on the interior of a vehicle used for an exclusive use shipment of radioactive material not exceed 22,000 dpm/100 cm^2.

Contrary to the above, on April 4, 1984, during surveys by a State of Washington inspector at the low level waste disposal site near Richland, Washington, removable contamination of 44,211 dpm/100 cm^2 was found on the floor of the trailer used for an exclusive use shipment of radioactive waste from the Nuclear Metals, Inc. facility.

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

C. Condition 16 of License No. SMB-179 requires that licensed material be possessed and used in accordance with statements and procedures contained in the application dated November 16, 1981. Item No. 12 of the application, section D.7, requires that all personnel exiting areas where source material is handled and processed will self-monitor for contamination on exit from the areas, and wash or change clothing, as needed, on any finding of contamination in excess of area background.

Contrary to the above, on June 19, 1984, several employees failed to self-monitor for contamination when exiting areas where source material is handled and processed.

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

Pursuant to the provisions of the 10 CFR 2.201, Nuclear Metals, Inc. is hereby required to submit to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps that will be taken and the results achieved; (4) the corrective steps that will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown.

NRC FORM 335 (2.84) NRCM 1102, 3201, 3202

U.S. NUCLEAR REGULATORY COMMISSION

BIBLIOGRAPHIC DATA SHEET

SEE INSTRUCTIONS ON THE REVERSE

1. REPORT NUMBER (Assigned by TIDC, add Vol. No., if any)
NUREG-0940
Vol. 3, No. 3

2. TITLE AND SUBTITLE
Enforcement Actions: Significant Actions Resolved
Quarterly Progress Report
(July - September 1984)

3. LEAVE BLANK

4. DATE REPORT COMPLETED
MONTH: October
YEAR: 1984

5. AUTHOR(S)
IE Enforcement Staff

6. DATE REPORT ISSUED
MONTH: October
YEAR: 1984

7. PERFORMING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

8. PROJECT/TASK/WORK UNIT NUMBER

9. FIN OR GRANT NUMBER

10. SPONSORING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)
Same as 7 above

11a. TYPE OF REPORT
Technical

b. PERIOD COVERED (Inclusive dates)
July - September 1984

12. SUPPLEMENTARY NOTES

13. ABSTRACT (200 words or less)

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

14. DOCUMENT ANALYSIS - a. KEYWORDS/DESCRIPTORS
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Radiation Safety Program, Transportation, Safety Evaluations

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