Enforcement Actions: Significant Actions Resolved Reactor Licensees

Semiannual Progress Report
July – December 1996

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ABSTRACT

This compilation summarizes significant enforcement actions that have been resolved during the period (July - December 1996) and includes copies of letters, Notices, and Orders sent by the Nuclear Regulatory Commission to reactor licensees with respect to these enforcement actions. It is anticipated that the information in this publication will be widely disseminated to managers and employees engaged in activities licensed by the NRC, so that actions can be taken to improve safety by avoiding future violations similar to those described in this publication.

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ENFORCEMENT ACTIONS: SIGNIFICANT ACTIONS RESOLVED REACTOR LICENSEES

January - June 1996

INTRODUCTION

This issue and Part of NUREG-0940 is being published to inform Nuclear Regulatory Commission (NRC) reactor licensees about significant enforcement actions and their resolution for the second half of 1996. Enforcement actions are issued in accordance with the NRC's Enforcement Policy, published as NUREG-1600, "General Statement of Policy and Procedure for NRC Enforcement Actions." Enforcement actions are issued by the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operation and Research (DEDR), and the Regional Administrators. The Director, Office of Enforcement, may act for the DEDR in the absence of the DEDR or as directed. The NRC defines significant enforcement actions or escalated enforcement actions as civil penalties, orders, and Notices of Violation for violations categorized at Severity Level I, II, and III (where violations are categorized on a scale of I to IV, with I being the most significant).

The purpose of the NRC Enforcement Program is to support the agency's safety mission in protecting the public and the environment. Consistent with that purpose, the NRC makes this NUREG available to all reactor licensees in the interest of avoiding similar significant noncompliance issues. Therefore, it is anticipated that the information in this publication will be widely disseminated to managers and employees engaged in activities licensed by NRC.

A brief summary of each significant enforcement action that has been resolved in the second half of 1996 can be found in the section of this report entitled "Summaries." Each summary provides the enforcement action (EA) number to identify the case for reference purposes. The supplement number refers to the activity area in which the violations are classified in accordance with the Enforcement Policy.

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

Section A of this report consists of copies of completed civil penalty or Order actions involving reactor licensees, arranged alphabetically. Section B includes copies of Notices of Violation that were issued to reactor licensees for a Severity Level I, II, or III violation, but for which no civil penalties were assessed.

The NRC publishes significant enforcement actions taken against individuals and involving materials licensees as Parts I and III of NUREG-0940, respectively.

SUMMARIES

A. CIVIL PENALTIES AND ORDERS

Baltimore Gas and Electric Company, Lusby, Maryland
(Calvert Cliffs Nuclear Power Plant), Supplement I, EA 96-179

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued July 25, 1996, to emphasize the importance of prompt identification of violations such that timely and comprehensive corrective action can be taken of violations when they exist. The action was based on violations of NRC requirements related to the fire protection of safe shutdown equipment. The licensee responded and paid the civil penalty on August 23, 1996.

Carolina Power & Light Company, Southport, North Carolina
(Brunswick Steam Electric Plant), Supplement I, EA 96-354

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$150,000 was issued November 19, 1996, to emphasize the importance of management oversight of the implementation of environmental qualification requirements and the need for prompt identification and comprehensive correction of conditions adverse to quality. The action was based on: (1) the failure to implement the EQ program in accordance with the requirements, and (2) a longstanding failure to implement the corrective action program with regard to EQ deficiencies. The licensee responded and paid the civil penalties on December 19, 1996.

Centerior Service Company, Oak Harbor, Ohio
(Davis-Besse Nuclear Power Station), Supplement I, EA 96-304

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued October 22, 1996, to emphasize the need for full compliance with Appendix R, and performing conservative operability and reportability determinations. The action was based on: (1) certain motor operated valves potentially being unable to perform their post-fire safe shutdown function, and (2) degraded radiant energy shields in the containment and containment annulus. The licensee responded and paid the civil penalty on November 21, 1996.

Commonwealth Edison Company, Downers Grove, Illinois
(Quad Cities Station), Supplement I, EA 96-114

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued June 13, 1996, to emphasize the need to identify significant deficiencies requiring prompt corrective actions. The action was based on a violation associated with the station's failure to promptly correct structural steel design deficiencies initially discovered in 1991. The licensee responded and paid the civil penalty on July 12, 1996.

Commonwealth Edison Company, Downers Grove, Illinois
(Dresden Station), Supplement I, EA 96-115

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued June 13, 1996, to emphasize the need to identify significant deficiencies requiring prompt corrective actions. The action was based on the station's failure to promptly correct structural steel design deficiencies initially discovered in 1991. The licensee responded and paid the civil penalty on July 12, 1996.

Commonwealth Edison Company, Downers Grove, Illinois
(Zion Nuclear Station), Supplement I, EA 96-216

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued August 23, 1996, to emphasize the importance of operator attention to equipment status and of prompt and comprehensive correction of violations. The action was based on violations associated with operational errors and unplanned changes to the status of safety-related equipment that occurred during the period of February through May 1996. The licensee responded and paid the civil penalty on September 27, 1996.

Consumers Power Company, Covert, Michigan
(Palisades Nuclear Generating Plant), Supplement I, EA 96-131

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued August 13, 1996, to emphasize the need to initiate prompt and effective corrective action for significant fire protection deficiencies. The action was based on an inspection that identified 10 CFR, Part 50, Appendix R, fire protection deficiencies that resulted in the facility being outside the design basis. The licensee responded and paid the civil penalty on September 4, 1996.

Entergy Operations, Inc., Russellville, Arkansas
(Arkansas Nuclear One), Supplement I, EA 96-274

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued September 6, 1996, to emphasize the importance of proper maintenance on safety-related components, including the need to identify problems encountered during the performance of such maintenance. The action was based on an event where a main steam valve failed to reseal following a reactor trip resulting in a steam generator boiling dry. The licensee responded and paid the civil penalty on October 7, 1996.

Florida Power and Light Company, Juno Beach, Florida
(Turkey Point Nuclear Plant), Supplement VII, EA 96-051

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 was issued July 16, 1996, to emphasize the importance of ensuring that employees who raise real or perceived safety concerns are not subject to discrimination for raising those concerns and that every effort is made to provide an environment in which all employees may freely identify safety issues without fear of retaliation or

discrimination. The action was based on a violation involving discrimination against an engineer formerly employed by the licensee. The licensee responded and paid the civil penalty on December 3, 1996.

Florida Power Corporation, Crystal River, Florida
(Crystal River Nuclear Plant), Supplement I, EA 96-126

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$500,000 was issued July 10, 1996, to emphasize effective licensee management oversight engineering, operations, and corrective action activities. The action was based on violations that were identified by the NRC as a result of inspections and investigations following the licensee's identification that an unauthorized evolution had been conducted by a shift of licensed operators on September 4, 1994, and that it had resulted in operation outside the design basis of the facility. It was subsequently identified that the same shift of operators had conducted the unauthorized evolution also on the previous day. Both tests were performed in an effort to resolve a long-standing safety concern by demonstrating that an operating curve provided by the engineering department was non-conservative. The licensee responded and paid the civil penalties September 9, 1996.

Houston Lighting & Power Company, Wadsworth, Texas
(South Texas Project), Supplement VII, EA 95-077

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$160,000 was issued October 17, 1995, to emphasize the importance of ensuring that appropriate controls exist to preclude discrimination against individuals for identifying safety concerns. The action was based on an investigation by the Office of Inspector General and a recently issued Department of Labor Administrative Law Judge's Recommended Decision and Order that found that discrimination had occurred against two former members of the licensee's security department. The violations were cited at Severity Level II because the manager was in a position above first-line supervision. The licensee responded on November 15, 1995 indicating when a final decision was made they would make a decision about payment. They paid the civil penalties on November 14, 1996.

Houston Lighting & Power Company, Wadsworth, Texas
(South Texas Project), Supplement VII, EAs 96-133 and 96-136

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$200,000 was issued September 19, 1996, to emphasize the importance of protecting individuals against discrimination and taking comprehensive corrective action that includes establishing accountability for violations of this requirement. The action was based on a Department of Labor decision that found the licensee contractors discriminated against two employees that were engaged in protected activities, in violation of 10 CFR 50.7. One of the violations was cited at a Severity Level II due to the level of supervision that the discrimination occurred. The licensee responded and paid the civil penalties on October 22, 1996.

Niagara Mohawk Power Corporation, Lycoming, New York
(Nine Mile Point), Supplement VII, EA 96-116

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$80,000 was issued July 24, 1996, to emphasize the importance of continuously assuring a work environment that is free of any harassment, intimidation, or discrimination against those who raise safety concerns. The action was based on a violation of 10 CFR 50.7. The licensee terminated the employment of one of its nuclear engineers for raising safety concerns. The violation was cited at a Severity Level II because management above first line supervision was involved in the discrimination. The licensee responded on August 23, 1996 and paid the civil penalty on December 16, 1996.

Northeast Nuclear Energy Company, Waterford, Connecticut
(Millstone Nuclear Power Plant), Supplement VII, EA 96-059

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 was issued June 4, 1996, to emphasize the importance of maintaining a work environment in which employees are free to engage in protected activities without fear of retaliation. The action was based on a Department of Labor Administrative Law Judge Recommended Decision and Order finding discrimination by the licensee's contractor (Bartlett Nuclear, Inc.) against one of the contractor's former employees for engaging in protected activities. The licensee responded July 2, 1996 and paid the civil penalty on October 25, 1996.

Portland General Electric Company, Rainier, Oregon
(Trojan Nuclear Plant), Supplement VII, EAs 96-111 and 94-067

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued June 6, 1996, to emphasize the significance of the management failures that led to this violation, and the importance of effective management processes to assure that information provided to the NRC is complete and accurate in all material aspects. The action was based on a violation involving the submission of incomplete and inaccurate information to the NRC in a Licensee Event Report in June 1991, and in a revision in October 1991. These LERs addressed degradation of electrical penetration assembly module seals. The licensee responded and paid the civil penalty on July 3, 1996.

Public Service Electric and Gas Company, Hancocks Bridge, New Jersey
(Hope Creek Generating Station), Supplement I, EAs 96-125 and 96-281

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$150,000 was issued October 23, 1996, to emphasize the importance of (1) appropriate planning for the testing of equipment following maintenance, (2) timely identification and correction of problems identified concerning safety-related equipment, and (3) appropriate evaluation prior to making changes to the facility. The action was based on violations involving: (1) two examples of failures to plan appropriate surveillance testing for control rod drive systems, (2) two examples of failures to promptly identify and correct conditions adverse to quality regarding reactor building ventilation supply duct

backdraft isolation dampers and excessive control rod withdrawal speeds, (3) failure to obtain Commission approval prior to making changes to the facility's service water system design that involved an unreviewed safety question, and (4) failure to maintain the service water system in accordance with the requirements of the Technical Specifications. The licensee responded and paid the civil penalty on November 22, 1996.

Southern Nuclear Operating Company, Inc., Birmingham, Alabama
(Farley Nuclear Plant), Supplement I, EA 96-410

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued December 4, 1996, to emphasize the importance of maintaining an adequate fire protection program for the protection of safety-related equipment and the need for prompt and comprehensive corrective actions. The action was based on a violation involving three examples in which the licensee failed to assure that one-hour fire barriers were installed in electrical cables associated with systems required for plant safe shutdown. The licensee responded and paid the civil penalty on December 23, 1996.

Vermont Yankee Nuclear Power Corporation, Brattleboro, Vermont
(Vermont Yankee Nuclear Power Station), Supplement I, EA 96-210

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000 was issued August 23, 1996. In order to emphasize the importance of ensuring the design of the safety-related residual heat removal system is not susceptible to single failure vulnerabilities, a Severity Level III violation was cited against the licensee. Although normal application of the Enforcement Policy would have resulted in no civil penalty being assessed, given the length of time (approximately 22 years) that this condition existed, as well as the number of prior opportunities that existed to identify and correct this violation sooner, the NRC staff exercised enforcement discretion and issued the violation assessing a civil penalty at the base amount. The licensee responded and paid the civil penalty on September 20, 1996.

Wisconsin Energy Corporation, Milwaukee, Wisconsin
(Point Beach Nuclear Power Plant), Supplement I, EAs 96-215 and 96-273

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$325,000 was issued December 3, 1996, to emphasize the need for full compliance with NRC regulatory requirements. The action was based on violations involving the failure to adequately: (1) conduct control room activities, (2) maintain plant configuration control, and (3) conduct independent fuel dry cask storage activities. The licensee paid the civil penalties on December 16, 1996 and responded on January 31, 1997.

Wolf Creek Nuclear Operating Corporation, Burlington, Kansas
(Wolf Creek Generating Station), Supplement I, EA 96-124

A Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$300,000 was issued July 1, 1996. The action was based on

violations that occurred during an event involving frazil icing on the safety-related essential service water system traveling screens and trash racks, which resulted in the loss of one train of the ultimate heat sink and jeopardized the second train. The violations also involved: (1) the failure to assure that inadequate ESW system line flow was promptly identified and corrected, (2) the failure to follow plant procedures while aligning the ESW system, and (3) the failures to include all work instructions and implement appropriate corrective action for the unit's turbine-driven auxiliary feedwater pump, which had failed during the icing event. The licensee responded and paid the civil penalties July 31, 1996.

B. SEVERITY LEVEL I, II, AND III VIOLATIONS, NO CIVIL PENALTY

Boston Edison Company, Plymouth, Massachusetts
(Pilgrim Nuclear Power Station), Supplement I, EA 96-271

A Notice of Violation was issued October 21, 1996, based on violations involving (1) two electrical containment penetrations there were not properly protected due to improper trip settings on the circuit breakers, and (2) the failure to identify and correct this condition sooner, even though it existed as early as 1988. A civil penalty was not proposed because the licensee identified the violation of the technical specification and took prompt and comprehensive corrective action once the violations were identified.

Carolina Power & Light Company, Southport, North Carolina
(Brunswick), Supplement I, EA 96-181

A Notice of Violation was issued July 12, 1996, based on a violation involving the licensee's failure to establish adequate design controls measures for the verification and testing of material changes made in the service water system pump during modifications implemented in 1993 and 1994. A civil penalty was not proposed because the licensee identified the violation and took immediate corrective actions which included an evaluation which identified a potential common mode failure mechanism that led to the subsequent shutdown of both units.

Carolina Power & Light Company, Hartsville, South Carolina
(Brunswick), Supplement I, EA 96-442

A Notice of Violation was issued December 13, 1996, based on violations involving the failure of the licensee to operate the facility at steady state reactor core power levels not in excess of 2436 megawatts and to maintain the average planar linear heat generation rate for each type of fuel as specified in the technical specifications. A civil penalty was not proposed because the licensee identified the violation and took immediate corrective and comprehensive actions.

Centerior Service Company, Perry, Ohio
(Perry Nuclear Power Plant), Supplement I, EA 96-367

A Notice of Violation was issued November 6, 1996, based on violations involving not taking Technical Specification required actions for an inoperable ECC train, failure to take effective corrective actions for significant conditions adverse to quality. A civil penalty was not proposed because the licensee identified the violations and the licensee took corrective actions.

Duquesne Light Company, Shippingport, Pennsylvania
(Beaver Valley Power Station), Supplement I, EA 96-244

A Notice of Violation was issued September 11, 1996, based on a violation which involved the failure to comply with 10 CFR 50.62 which requires that the licensee provide an alternate means, independent of the Reactor Protection System, of tripping the turbine and actuating auxiliary feedwater under conditions indicative of an ATWS. A civil penalty was not proposed because the licensee has not been subject to an escalated enforcement action in the past two years and the licensee took prompt and comprehensive corrective actions.

Entergy Operations, Inc., St. Francisville, Louisiana
(River Bend Station), Supplement I, EA 96-329

A Notice of Violation was issued November 7, 1996, based on violations involving the failure to perform surveillance testing in accordance with the requirements specified in Technical Specifications and involved the following equipment: (1) the Division I battery, (2) the Division III battery, (3) the drywell airlock, (4) the drywell combination equipment hatch/personnel door, (5) the prefilters for the standby gas treatment control room fresh air, and fuel building ventilation systems, and (6) a primary containment penetration isolation valve. A civil penalty was not proposed because the licensee has not been subject to an escalated enforcement action in the past two years, made prompt identification, and took comprehensive corrective actions.

Florida Power & Light Company, Juno Beach, Florida
(St. Lucie), Supplement I, EAs 96-236 and 96-249

A Notice of Violation was issued September 19, 1996, based on a violation involving the licensee's failure to recognize an unreviewed safety question related to the implementation of a valve lineup change to the emergency diesel generator fuel oil transfer system. A civil penalty was not proposed because the licensee has not been subject to an escalated enforcement action in the past two years, and took comprehensive corrective actions.

Georgia Power Company, Birmingham, Alabama
(Vogtle Electric Generating Plant), Supplement I, EA 96-479

A Notice of Violation was issued December 31, 1996, based on violations involving (1) the inoperability of the Unit 1B Safety Injection Pump for a period greater than that allowed by the Technical Specifications due

to inadequate pump motor cooling and (2) the licensee's failure to establish adequate procedures for the disassembly and reassembly of the motor coolers during maintenance activities. A civil penalty was not proposed because the licensee identified the violations and took prompt and comprehensive corrective actions.

McEnany Roofing, Inc., Tampa, Florida
Supplement VII, EA 96-336

A Notice of Violation was issued December 5, 1996, based on a violation involving the discrimination of an employee when the employee was terminated for raising concerns about the failure of another employee to adhere to NRC security regulations at the Florida Power Corporation's Crystal River facility. The company described actions at the conference taken to address the implementation of the requirements of ERA Section 211. These included: (1) strengthening the company's policies with regard to ensuring employee concerns are promptly addressed and resolved, (2) training supervisors and employees with regard to their responsibilities in the area of employee protection, and (3) discussions of employee rights with individual employees.

Nebraska Public Power District, Columbus, Nebraska
(Cooper Nuclear Station), Supplement I, EA 96-202

A Notice of Violation was issued September 30, 1996, based on violations involving the failure to: (1) insert control rods in the proper sequence following a loss of a reactor recirculation pump, (2) notify shift supervision of an unexpected situation, i.e., a mispositioned control rod, for approximately 20 minutes, and (3) obtain the concurrence of the shift supervisor and reactor engineer in developing a recovery plan for a mispositioned control rod. A civil penalty was not issued because the licensee identified the violations and took comprehensive corrective action of the violations.

Nebraska Public Power District, Columbus, Nebraska
(Cooper Nuclear Station), Supplement III, EA 96-307

A Notice of Violation was issued November 20, 1996, based on access authorization violations involving multiple failures to (1) consider criminal history information, (2) develop references for applicants, (3) review military background information, (4) document interviews when derogatory information was discovered, (5) verify activities during periods of unemployment, (6) conduct complete background investigations when "updating" access, and (7) two failures to complete full background investigations after granting temporary access. A civil penalty was not issued because the licensee identified the violations and took prompt and comprehensive corrective actions which included a change in management in the security program.

Omaha Public Power District, Ft. Calhoun, Nebraska
(Fort Calhoun Station), Supplement I, EA 96-204

A Notice of Violation was issued July 31, 1996, based on violations involving the licensee's (1) providing inadequate procedural guidance for pressurizer cooldown evolutions, (2) failing to follow procedures by not taking adequate compensatory measures for disabling the LTOP function, and (3) failing to follow procedures by not logging abnormal plant conditions and by not conducting proper shift turnovers. A civil penalty was not proposed because the licensee had not had an escalated action in the past two years and the licensee took prompt and comprehensive corrective actions.

PECO Energy, Wayne, Pennsylvania
(Limerick Generating Station), Supplement I, EA 96-209

A Notice of Violation was issued October 17, 1996, based on a violation involving the failure to establish adequate controls for excluding foreign material from the Unit 1 suppression pool. A civil penalty was not proposed because the licensee had not had an escalated action in the past two years and the licensee took prompt and comprehensive corrective actions.

Raytheon Engineers and Constructors, Inc., Philadelphia, Pennsylvania
Supplement VII, EAs 96-134 and 96-137

A Notice of Violation was issued September 19, 1996, based on violations involving discrimination against former employees who engaged in protected activities at South Texas Project Electric Generating Station.

Tennessee Valley Authority, Chattanooga, Tennessee
(Browns Ferry), Supplement I, EA 96-199

A Notice of Violation was issued August 1, 1996, based on a violation involving the inoperability of the RCIC system. The reactor remained in operation during this period, which exceeded seven days. A civil penalty was not proposed because the licensee took comprehensive corrective actions and although there had been previous escalated enforcement action in the two years prior to the occurrence, that violation had occurred in 1993 and was not indicative of current licensee performance. That fact, in conjunction with the recent overall good performance of the licensee warranted the exercise of discretion, and no civil penalty was proposed.

Virginia Electric and Power Company, Glen Allen, Virginia
(Surry Power Station), Supplement I, EA 96-231

A Notice of Violation was issued August 16, 1996, based on violations involving (1) the inoperability of the Unit 1 and 2 containment hydrogen analyzers for a period greater than that allowed by the Technical Specifications, and (2) the failure to establish adequate procedures to assure the operability of the containment hydrogen analyzers. A civil

penalty was not proposed because the licensee identified the violations and took prompt and comprehensive corrective actions.

Washington Public Power Supply System, Richland, Washington
(Washington Nuclear Project-2), Supplement III, EA 96-267

A Notice of Violation was issued October 1, 1996, based on a violation involving inadequate assessment and monitoring for potential offsite consequences of a radiological emergency condition. A civil penalty was not proposed because the licensee identified the violation and took comprehensive action to correct the violations.

A. CIVIL PENALTIES AND ORDERS

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

July 25, 1996

EA 96-179

Mr. Charles H. Cruse
Vice President - Nuclear Energy
Baltimore Gas and Electric Company
Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, Maryland 20657-4702

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL
PENALTY - \$50,000
(NRC Inspection Report Nos. 50-317/96-05 and 50-318/96-05)

Dear Mr. Cruse:

This letter refers to the NRC inspection conducted from May 8 through 10, 1996, at the Calvert Cliffs Nuclear Power Plant. The findings of the inspection were discussed with your staff during an exit meeting on May 10, 1996, as well as during follow-up discussions with your licensing staff on May 24 and 30, 1996. The inspection was conducted, in part, to review calculations and test results used to evaluate the acceptability of emergency ventilation provided for the emergency switchgear rooms on the 27 foot and 45 foot elevations in the event of a fire. During the inspection, apparent violations of NRC requirements were identified, and were described in the NRC inspection report transmitted with our letter dated June 13, 1996. On June 27, 1996, a predecisional enforcement conference was conducted with you and members of your staff to discuss the violations, their causes, and your corrective actions.

Based on the information developed during the inspection and the information you provided during the enforcement conference, the NRC has determined that violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation (Notice) and Proposed Imposition of Civil Penalty, and the circumstances surrounding the violations are described in detail in the subject inspection report. The first violation involves the failure to implement, prior to an NRC Electrical Distribution System Functional Inspection (EDSFI) in 1992, a fire protection plan which described the means to limit fire damage to the safe shutdown equipment in the 27 foot elevation Emergency Switchgear Room (ESR) should a severe fire occur in the 45 foot ESR. Specifically, because the ventilation system for the switchgear rooms uses common ducting and fire dampers, a severe fire in the 45 foot ESR would disable the ventilation system for the 27 foot ESR. As a result, safe shutdown equipment in the 27 foot ESR would then be subjected to temperatures which would exceed those temperatures for which the equipment was designed.

The second violation involves the failure to adequately verify the corrective actions taken when this lack of protection for the safe shutdown equipment in the 27 foot elevation Emergency Switchgear Room was brought to the attention of Baltimore Gas & Electric Company (BG&E) by the NRC in April 1992. Although the NRC EDSFI raised this issue as an unresolved item in 1992, the corrective actions taken by your staff were not verified by detailed analysis or test until May 1996. More specifically, subsequent to the EDSFI inspection, you concluded that a total flow of 10,000 cubic feet per minute (cfm) was needed to cool the emergency switchgear rooms adequately. In order to provide this amount, you staged a portable fan in the area and developed and implemented procedural guidance to place a fan in the ESR rollup door with the steel rollup door lowered to the top of the fan housing, and the personnel door blocked open. However, you did not verify that this configuration would provide the 10,000 cfm air flow rate that was credited in your calculation. When questioned by NRC inspectors in March 1996, you performed a test which indicated a flow rate of only 5,155 cfm.

At the predecisional enforcement conference, you indicated that no safety issue exists because one fan subsequently was determined to be adequate for safe shutdown, even though you have added, since the recent inspection, a second fan to provide additional flow. Nonetheless, the violations represent a significant regulatory concern in that they demonstrate that the level of knowledge by engineers and supervisors on 10 CFR Part 50, Appendix R issues was poor, and they neither adequately challenged assumptions in calculations nor verified them through testing. In addition, management's attention was insufficient to address these issues in a timely manner. As such, the violations represent a breakdown in the control of licensed activities that collectively represent a potentially significant lack of attention toward licensed responsibilities which resulted in your failure, for an extended period, to demonstrate that the safe shutdown equipment criteria had been met. Therefore, the two violations have been categorized in the aggregate at Severity Level III in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because Calvert Cliffs has been the subject of an escalated enforcement action within the last two years (namely, issuance of a Severity Level III violation and \$50,000 civil penalty on January 2, 1996, for violations associated with deficiencies in the access authorization program; Reference, EA 95-170), the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit for *Identification* is not warranted because the violations were identified by the NRC. Credit for *Corrective Action* is warranted because once the violations were identified by the NRC in May 1996, your actions were considered both prompt and comprehensive. These actions, which were noted in your presentation at the predecisional enforcement conference, included, but were not limited to: (1) completion of an accelerated Appendix R overview evaluation on June 14, 1996, in which a contractor was retained to verify Appendix R support calculations, recommend a methodology for Appendix R equipment selection, review

Appendix R Information Notices for applicability to Calvert Cliffs, and evaluate the feasibility of manual action by operators; (2) plans to perform an accelerated Appendix R Self-Assessment by November 1996 for the purpose of conducting a more comprehensive review of the program; (3) plans to develop and conduct Appendix R training for engineering support personnel by December 1996; and (4) review of the overall culture at Calvert Cliffs that allowed these conditions to persist.

Therefore, to emphasize the importance of prompt identification of violations such that timely and comprehensive corrective action can be taken of violations when they exist, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice and Proposed Imposition of Civil Penalty in the base amount of \$50,000 for the Severity Level III problem.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If redactions are required, a proprietary version containing brackets placed around the proprietary, privacy, and/or safeguards information should be submitted. In addition, a non-proprietary version with the information in the brackets redacted should be submitted to be placed in the PDR.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96.511.

Sincerely,

Thomas T. Martin
Regional Administrator

Docket Nos. 50-317 and 50-318
License Nos. DPR-53 and DPR-69

Enclosure: Notice of Violation and Proposed Imposition of
Civil Penalty

ENCLOSURE
NOTICE OF VIOLATION
AND

PROPOSED IMPOSITION OF CIVIL PENALTY

Baltimore Gas and Electric Company
Calvert Cliffs Nuclear Power Plant

Docket Nos. 50-317, 50-318
License Nos. DPR-53, DPR-69
EA 96-179

During an NRC inspection conducted on May 8-10, 1996, the results of which were communicated to the licensee during an exit meeting on May 10, 1996 and in follow-up discussions on May 24 and 30, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

- A. 10 CFR 50.48(a) requires, in part, that each operating nuclear power plant have a fire protection plan that describes the means to limit fire damage to structures, systems, or components important to safety so that the capability to safely shut down the plant is ensured.

Contrary to the above, prior to an NRC EDSFI inspection in March-April 1992, the Baltimore Gas and Electric (BG&E) Company fire protection plan was inadequate in that it did not include the means to limit fire damage to the safe shutdown equipment in the 27 foot elevation Emergency Switchgear Room (ESR) should a severe fire occur in the 45 foot ESR. Specifically, because the ventilation system for the switchgear rooms uses common ducting and fire dampers, a severe fire in the 45 foot ESR would disable the ventilation system for the 27 foot ESR. As a result, safe shutdown equipment in the 27 foot ESR would then be subjected to temperatures which would exceed those temperatures for which the safe shutdown equipment was designed. (01013)

- B. License Condition 2.C.3 for Unit 1 (and License Condition 2.C.4 for Unit 2) requires that BG&E maintain the administrative controls (quality assurance program) identified in Section 6 of the NRC's Fire Protection Safety Evaluation Report (SER) dated September 14, 1979. Section 6 of that SER, Administrative Controls, states that the quality assurance program will be submitted at a later date. The Quality Assurance Program subsequently was submitted with BG&E's letter, dated December 31, 1979, which states that BG&E has implemented a program which meets the NRC's guidelines with specific exceptions. The NRC's guidelines were contained in Branch Technical Position (BTP) APCSB 9.5-1, Appendix A. BTP APCSB 9.5-1, Appendix A requires, in part, that conditions adverse to fire protection, such as failures, malfunctions, deficiencies, deviations, defective components, uncontrolled combustible material and non-conformances are promptly identified, reported, and corrected.

Contrary to the above, from April 3, 1992 until June 1996, conditions adverse to fire protection were not promptly corrected when the lack of protection for the safe shutdown equipment in the 27 foot elevation ESR noted in Violation A above was brought to the attention of BG&E on April 3, 1992, via an NRC EDSFI inspection. Corrective actions which were taken were based on engineering judgement. Specifically, a 10,300 cfm fan was purchased to provide an estimated flow of 8,000 cfm in the 27 foot and 45 foot ESRs. When subsequent calculations determined that 10,000 cfm was needed for adequate cooling, it was assumed that the 10,300 cfm fan would provide the 10,000 cfm cooling. These corrective actions were not verified by detailed analysis or test until May 1996, and were, in fact, inadequate to satisfactorily resolve the condition, until June 1996, at which time the required and calculated cooling flow provided by the emergency fans was determined and verified. (01023)

These two violations are classified in the aggregate as a Severity Level III problem (Supplement I).

Civil Penalty - \$50,000.

Pursuant to the provisions of 10 CFR 2.201, Baltimore Gas and Electric Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved.

If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the

Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at King of Prussia, Pennsylvania
this 25th day of July 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

November 19, 1996

EA 96-354

Carolina Power & Light Company
ATTN: Mr. W. R. Campbell
Vice President
Brunswick Steam Electric Plant
Post Office Box 10429
Southport, North Carolina 28461

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES -
\$150,000
(NRC Inspection Report Nos. 50-325/96-14 AND 50-324/96-14)

Dear Mr. Campbell:

This refers to the inspection conducted between June 24 and September 17, 1996, at the Brunswick facility. The inspection included a review of your environmental qualification (EQ) program in accordance with the requirements of 10 CFR 50.49. You were informed of the results of our inspection on September 17, 1996, and the inspection report was sent to you by letter dated October 4, 1996. An open predecisional enforcement conference was conducted in the Region II office on October 21, 1996, with you and members of your staff to discuss the apparent violations, the root causes, and your corrective actions to preclude recurrence. A letter summarizing the conference was sent to you on November 1, 1996.

Based on the information developed during the inspection and the information you provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice) and the circumstances surrounding them are described in detail in the subject inspection report.

Violation A in the enclosed Notice, involves your failure to implement the EQ program in accordance with the requirements of 10 CFR 50.49. Specifically, numerous deficiencies were identified, some having existed since the EQ program was initially implemented. They involved failures to (1) incorporate appropriate equipment in the EQ program, (2) maintain documentation of qualification for safety-related equipment, and (3) maintain EQ equipment lists and files accurately. These deficiencies are significant in that, collectively, they represent a programmatic breakdown in the implementation of your EQ program. The root causes of Violation A were a lack of management oversight of the program, inadequate turnover of the EQ program implementation from contractors to licensee engineers, and the lack of EQ expertise in your program implementation and oversight.

Violation B in the enclosed Notice, involves significant failures to implement your corrective action program with regard to EQ deficiencies over a long period of time. EQ nonconformances identified as early as 1991 were not properly corrected, and EQ deficiencies identified in contractor and

self-initiated audits as early as 1994 were closed without adequate resolution, were not placed in appropriate corrective action tracking programs, or remained open with no review of their impact on the EQ program. The root causes of this violation included informal followup of issues, inadequate management review of resolution, and paper-to-paper closure of issues without ensuring that identified basic program deficiencies were corrected.

At the predecisional enforcement conference you indicated that no equipment operability issues had been identified during your review of the EQ program deficiencies. That fact notwithstanding, Violation A is of significant regulatory concern because the plant operated for a number of years without your staff ensuring the environmental qualification of key pieces of equipment such that there would be assurance that the equipment would operate if called upon to function. Therefore, Violation A is classified in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III violation.

In addition to these EQ program deficiencies, the NRC is particularly concerned with your historically poor performance in implementing corrective actions for EQ program weaknesses, as cited in Violation B. Although you expended considerable effort for internal and contract assessment of your EQ program, you failed to follow through to ensure correction of the identified deficiencies in that program. It is significant that many deficiencies were not entered into corrective action programs and remained uncorrected for a number of years; however, it is more significant that: (1) items were closed without proper assurance that the deficiencies were corrected, and (2) management failed to comprehend the full scope of problems that existed and failed to provide necessary direction and focus for the corrective action efforts. Therefore Violation B also is classified as a Severity Level III violation, in accordance with the Enforcement Policy.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last two years¹, the NRC considered whether credit was warranted for Identification and Corrective Action in accordance with the civil penalty assessment process described in Section VI.B.2 of the Enforcement Policy. With regard to Violation A, the NRC concluded that it is not warranted to give credit for Identification because the breakdown in the EQ program was identified by the NRC. With regard to consideration for Corrective Action, your corrective actions included: (1) reviews of program deficiencies by a relatively large team of licensee and contract employees with expertise in EQ;

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¹ A Severity Level III violation was issued on July 12, 1996, (EA 96-181) related to design control measures for service water system modifications. A Severity Level III violation was issued on April 4, 1996, (EA 96-054) for failure to meet fitness-for-duty requirements. A Severity Level III violation was issued on November 20, 1995, (EA 95-228) related to suitability of materials used in valves in the residual heat removal system. A Severity Level III problem was issued on September 8, 1995, (EA 95-166) related to design control, modification and testing of the high pressure injection system and reactor core isolation cooling system.

(2) revision of the EQ master list and identification of appropriate performance specifications and environmental conditions; (3) review of testing parameters; (4) staffing and training initiatives; and (5) establishing program audits. Based on the above, the NRC determined that credit was warranted for Corrective Action, resulting in a base civil penalty of \$50,000 being proposed for Violation A.

Because the NRC identified the violation associated with the corrective action problem cited in Violation B, credit for Identification was not considered appropriate. With regard to consideration for Corrective Action for Violation B, you now require initiation of condition reports for audit findings, formal tracking of followup actions, and documented dispositions of deficiencies. You also now require approval of significant condition reports by a higher level of management. Therefore, the NRC determined that credit was warranted for Corrective Action for Violation B, which would normally result in a civil penalty being assessed at the base amount of \$50,000 for this violation. However, the NRC is concerned that the historical implementation of your corrective action program was deficient in several key areas. Since 1991, conditions adverse to quality in your EQ program: (1) were poorly tracked, (2) were closed without properly being dispositioned, (3) received inadequate management attention, and (4) were not assessed as indicators of overall weaknesses in the corrective action program. Accordingly, in order to stress the significance of the NRC's concern associated with the past breakdown in the implementation of your corrective action program, I have decided to exercise enforcement discretion, in accordance with Section VII.A of the Enforcement Policy, and escalate the civil penalty for Violation B to twice the base amount for this Severity Level III violation. The civil penalty for Violation B is \$100,000.

Therefore, to emphasize the importance of management oversight of the implementation of EQ requirements and the need for prompt identification and comprehensive correction of conditions adverse to quality; and in consideration of your previous escalated enforcement actions, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice) for the two Severity Level III violations at the base amount of \$50,000 for Violation A and twice the base amount, or \$100,000, for Violation B. The total civil penalties proposed for this action is \$150,000.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

Stewart D. Ebner
Regional Administrator

Docket Nos. 50-325, 50-324
License Nos. DPR-71, DPR-62

Enclosure: Notice of Violation and Proposed
Imposition of Civil Penalties

cc w/encl:
W. Levis, Director
Site Operations
Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461

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Plant Manager
Brunswick Steam Electric Plant
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J. Cowan, Vice President
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Raleigh, NC 27602

Gerald D. Hicks
Manager - Regulatory Affairs
Carolina Power & Light Company
P. O. Box 10429
Southport, NC 28461

cc w/encl cont'd: (see next page)

cc w/encl cont'd:

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and Senior Counsel
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Jerry W. Jones, Chairman
Brunswick County Board of
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P. O. Box 249
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Dan E. Summers
Emergency Management Coordinator
New Hanover County Department of
Emergency Management
P. O. Box 1525
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William H. Crowe, Mayor
City of Southport
201 East Moore Street
Southport, NC 28461

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Carolina Power and Light Company
Brunswick Nuclear Plant

Docket Nos. 50-325, 50-324
License Nos. DPR-71, DPR-62
EA 96-354

As a result of an NRC inspection completed on September 17, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions", NUREG-1600, the NRC proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

- A. 10 CFR 50.49 (d) requires, in part, the licensee to prepare a list of electric equipment important to safety covered by 10 CFR 50.49 (b), and include information concerning performance specifications, electrical characteristics and environmental conditions for this electric equipment in a qualification file; and, keep the list and information in the file current and retain the file in auditable form for the entire period during which the covered item is installed in the plant or is stored for future use.

10 CFR 50.49 (f) requires, in part, that each item of electric equipment important to safety be qualified by testing of, or experience with, identical or similar equipment, and that such qualification shall include a supporting analysis to show that the equipment to be qualified is acceptable.

10 CFR 50.49 (j) requires, in part, a record of the qualification in auditable form to permit verification that each item is qualified and meets its specified performance requirements under predicted environmental conditions.

10 CFR 50.49 (k) states that electric equipment important to safety which was previously required to be qualified in accordance with NRC's "Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors," November 1979 (Division of Operating Reactors (DOR) Guidelines), need not be requalified to 10 CFR 50.49. However, DOR Guidelines require that the radiation service condition include the sum of the gamma and beta doses unless it can be shown by assuming a conservative unshielded surface beta dose of 2.0×10^8 RADS and considering shielding factors, that the beta dose to radiation sensitive equipment internals would be less than or equal to 10 percent of the total gamma dose to which an item of equipment has been qualified. The DOR Guidelines further require that qualification records be complete and auditable for qualification to be considered valid.

Enclosure

Notice of Violation and Proposed   2
Imposition of Civil Penalties

Contrary to the above, as of June 14, 1996, environmental qualification requirements were not met, as evidenced by the following examples:

1. The licensee failed to: (1) include the R.G. Laurence solenoid valves in the post-accident sampling system (PASS) and residual heat removal system of Units 1 and 2, identified by plant tag numbers 1(2)-RXS-SV-4180, 4181, 4193, 4194, and 1(2)-E11-SV-F079A, F079B, F080A, and F080B on the list of electric equipment important to safety required to be qualified under 10 CFR 50.49, (2) test or demonstrate that the subject Laurence solenoid valves were identical or similar to an appropriately tested configuration, and (3) document the qualification of the subject Laurence solenoid valves in the auditable form.
2. The licensee failed to: (1) include the Target Rock solenoid valves in the PASS of Units 1 and 2, identified by plant tag numbers 1(2)-RXS-SV-4182, 4183, 4184, 4185 and 4192, on the list of electric equipment important to safety required to be qualified under 10 CFR 50.49, (2) provide an analysis demonstrating that the subject Target Rock solenoid valves were acceptable, and (3) document qualification of the subject Target Rock solenoid valves in an auditable form.
3. The licensee failed to: (1) include Target Rock open and close limit switches for PASS Valves 1(2)-RXS-SV-4182, 4183, 4184, and 4185, on the list of electric equipment important to safety required to be qualified under 10 CFR 50.49, (2) provide an analysis demonstrating that the subject Target Rock limit switches were acceptable, and (3) document qualification of the subject Target Rock limit switches in an auditable form.
4. The licensee failed to maintain the Environmental Qualification (EQ) equipment list and EQ files current and in an auditable form, in that: (1) the EQ equipment list was not being maintained current as demonstrated by hundreds of items identified on the list as environmentally qualified without a reference to a qualification data package (QDP), the document utilized to establish environmental qualification; (2) several QDPs had been in revision for over two years; (3) several QDPs had never been issued, (4) Enertech/Herion solenoid Valve 2-B32-SV-F019 was installed and declared operational without a QDP being issued and placed in the EQ File; (5) the QDPs did not include the latest Reactor Building environmental profiles which are required to establish predicted environmental condition; (6) Hydrogen Water Chemistry modifications changed the radiation profiles and they had not been addressed in the EQ files; and (7) Beta radiation effects were not addressed in the EQ files.
5. The licensee failed to provide documentation in an auditable form to verify qualification of the safety-related Motor Control

Centers 1(2)XA, 1(2)XB, 1(2)XC, 1(2)XD, 1(2)XE, 1(2)XF, 1(2)XH, 1(2)XM, 1(2)XA-2, 1(2)XB-2, 1(2)XDA, and 1(2)XDB which are located in the Reactor Building in that the heat transfer analysis included in the file to demonstrate qualification was not based on the most severe design basis accident conditions that had been postulated based on the licensee's Reactor Building Environmental Report, Revision 4.

6. The licensee failed to: (1) include the following equipment important to safety on the EQ equipment list required to be qualified to 10 CFR 50.49: 120/208 AC distribution panels such as but not limited to Panels 1(2)A-RX, 1(2)B-RX, 1(2)C-RX, 1(2)D-RX, and 1(2)AB-RX; Potentiometers 1-1XE-EBO-POT, 1-1XF-EE2-POT, 2-2XE-EBO-POT, and 2-2XF-EE2-POT; various types of fuses identified as FRN-R, FNA, NOS, RES, NON, and SC; and thread sealants, (2) test or demonstrate that the equipment listed in (1) above, was similar to a tested configuration, and (3) document qualification of the equipment listed in (1) above, in an auditable form.
7. The licensee failed to maintain the EQ equipment list current by deleting the 300 EQ components listed in CP&L Great Idea numbers NED-326 and NED-327 without adequate justification and management review. Specifically, subsequent review of these EQ data changes in 1995 and 1996 disclosed that more than 50 of the 300 components had been downgraded, i.e., removed from the licensee's EQ Program, incorrectly. (01013)

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

- B. 10 CFR 50, Appendix B, Criterion XVI, requires that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.

10 CFR 50, Appendix B, Criterion V, requires that activities affecting quality be prescribed by documented instructions or procedures, and shall be accomplished in accordance with these instructions or procedures.

Carolina Power and Light Company Plant Program Procedure PLP-4, Corrective Action Management, implements the requirements of 10 CFR 50, Appendix B, Criterion XVI, at the Brunswick Nuclear Plant.

Contrary to the above, as of the dates indicated, the licensee failed to assure that conditions adverse to quality were promptly identified and corrected and failed to follow Procedure PLP-4 as described in the examples below:

1. CP&L Procedure PLP-4, Revisions 4 through 17, dated December 26, 1990 through May 31, 1996, requires managers to assure that assigned corrective actions are implemented.
  - a. Corrective actions associated with Adverse Condition Report (ACR) 91-181 which was identified in April 1991 regarding maintenance of the EQ program required by 10 CFR 50.49 were not implemented as of June 14, 1996.
  - b. Corrective actions identified on ACR number N93-0101 which was identified in August 1993 and subsequently reissued as ACR number 94-00980 in June 1994 regarding associated circuits were not implemented as of June 14, 1996.
2. Paragraph 6.0 of CP&L Procedure PLP-4, Revision 14, dated March 24, 1995, requires individuals identifying a condition to consult with their supervisors and initiate a Condition Report (CR). A condition is defined in paragraph 4.5 of PLP-4 as an adverse condition or a condition not meeting expectations.

Condition Reports (CRs) were not initiated to document and correct the following conditions not meeting expectations:

- a. The finding that EQ related QDPs had not been updated to account for the impact of hydrogen water chemistry increased radiation levels on EQ equipment, as documented in Engineering Service Request (ESR) 9400752, dated May 11, 1995.
  - b. The finding that QDPs potentially impacted by engineering changes may require revision, as documented in ESR 9400742, dated May 11, 1995.
  - c. The finding that procedures covering application of thread sealants for EQ equipment required revision and that unqualified thread sealants may have been used in EQ equipment applications, as documented in ESR 9400743, dated March 29, 1995.
3. Paragraphs 4.2 of CP&L Procedure PLP 4, Revision 15, dated June 7, 1995, requires managers and personnel to ensure CRs are initiated when they become aware of adverse conditions.

Managers in the Design Control Group in the Brunswick Engineering Site Support Organization did not ensure that CRs were initiated to document and correct numerous deficiencies in the Brunswick EQ program which were documented in an unpublished, undated document, titled EQ Self-Assessment, when it was discussed with them in November 1995 through January 1996. The individual who identified the conditions also failed to initiate a CR.

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4. Paragraph 6.0 of CP&L Procedure PLP-4, Revisions 14 through 17, dated March 24, 1995 through May 31, 1996, requires managers to ensure that assigned corrective actions are effective and are implemented.

Corrective actions to resolve discrepancies in the EDBS safety classification for EQ equipment documented on CR 95-00513, dated February 22, 1995, were not effective and were not properly implemented as of June 14, 1996.

5. Paragraph 4.2 of CP&L Procedure PLP-4, Revisions 17 and 18, dated May 13, 1996 and August 7, 1996, requires managers to assure CRs are initiated for adverse conditions and events.
  - a. On August 22, 1996, the NRC identified that a CR had not been initiated to document the fact that Control Room personnel on duty at 3:00 P. M. on July 18, 1996 had not been informed regarding compensatory measures for potential failure of valves on the Post Accident Sampling System.
  - b. On August 6, 1996, the NRC identified that a CR had not been initiated to document that the Target Rock open and close limit switches for the PASS valves 1(2)-RXS-SV-4182, 4183, 4184, and 4185 were not EQ qualified. (02013)

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

Pursuant to the provisions of 10 CFR 2.201, Carolina Power and Light Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalties (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with

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a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalties in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties.

Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalties.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II and to the Resident Inspector at the Brunswick facility.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Atlanta, Georgia
this 19th day of November 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

October 22, 1996

EA 96-304

Mr. John K. Wood
Vice President - Nuclear
Davis-Besse Nuclear Power Station
Centerior Service Company
5501 North State Route 2
Oak Harbor, OH 43449

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION
NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$50,000
(NRC INTEGRATED INSPECTION REPORT NO. 50-346/96008(DRS))

Dear Mr. Wood:

This refers to the inspection conducted on June 24 through July 11, and August 14-15, 1996, at the Davis-Besse Nuclear Power Station. The inspection included a review of the circumstances surrounding certain motor operated valves (MOVs) being potentially unable to perform their post-fire safe shutdown function, and degraded radiant energy shields in the containment and containment annulus. These conditions were reported to the NRC in Licensee Event Reports dated April 19, May 17, and July 31, 1996. The report documenting the inspection was sent by letter dated September 12, 1996, and an open pre-decisional enforcement conference was conducted on September 26, 1996.

Based on the information developed during the inspection and the information that was provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) and the circumstances surrounding the violations are described in detail in the subject inspection report.

The violation in Section I of the Notice involves sixteen MOVs that were potentially unable to perform their post-fire safe shutdown function in accordance with 10 CFR Part 50, Appendix R, Section III.G, because their control circuits were susceptible to fire induced hot shorts. On February 28, 1992, the NRC issued Information Notice 92-18, "Potential for Loss of Remote Shutdown Capability During a Control Room Fire," that identified a postulated common mode failure mechanism in which a postulated fire could cause hot short damage to MOV control circuits resulting in damage to valves needed for post-fire safe shutdown. In April 1994, the Davis-Besse staff completed its initial evaluation of Information Notice 92-18 and determined that there were approximated 35 valves that were potentially affected by this scenario. However, the evaluation concluded that no further action was necessary, based on the low probability for the scenario to occur. This conclusion was

inappropriately based on a 1992 Nuclear Management and Resources Council (NUMARC) recommendation that was not endorsed by the NRC. On March 20, 1996, the NRC informed your staff that this approach was unacceptable. Your staff's subsequent reevaluation of Information Notice 92-18 determined that 16 MOVs were affected requiring procedural changes, modifications, or compensatory measures to ensure Appendix R safe shutdown capability.

While the probability of a fire occurring as described in Appendix R is relatively low, the consequences of such an event occurring at Davis-Besse could have been high since the ability to maintain the plant in hot standby, as required by Appendix R, could only have been achieved by significant operator actions, troubleshooting, and repair activities to compensate for the design deficiencies. Therefore, the violation in Section I of the Notice has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, at Severity Level III.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last two years¹, the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit was not warranted for identification because the NRC identified the violation in Section I of the Notice.

Credit was warranted for your comprehensive corrective actions for the violation in Section I of the Notice, which included initiating a corrective action document based on reconsideration of Information Notice 92-18, verifying that appropriate compensatory measures (fire watches) were in place, expanding the scope of review beyond the control room fire described in Information Notice 92-18 to consider single hot shorts in all fire areas containing circuits for safe shutdown MOVs, reaffirming expectations regarding Information Notice evaluations, modifying the Information Notice review process to utilize the Corrective Action Process, planning an external peer assessment of the Davis-Besse industry experience program, and revisiting a sample of Information Notice responses where industry guidance was used.

Therefore, to emphasize the need for full compliance with Appendix R, along with adequate review of NRC Information Notices, conservative operability and reportability determinations, and the need to identify violations, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice in the total amount of \$50,000 for the Severity Level III violation.

Section II of the Notice describes one violation not assessed a civil penalty involving the failure to take compensatory measures for inoperable radiant energy shields in the containment and containment annulus. This violation has

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¹ A Severity Level III problem (identified in April 1996) was issued on June 13, 1996 (EA 96-122).

been categorized at Severity Level IV in accordance with the Enforcement Policy. While this violation is more than of minor concern, a higher severity level was not assessed because the probability of fire occurring in these areas was low due to the lack of an ignition source and low combustible loading.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

A. Bill Beach
Regional Administrator *for*

Docket No. 50-346
License No. NPF-3

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalty

cc w/encl: John P. Stetz, Senior
Vice President - Nuclear
J. H. Lash, Plant Manager
J. L. Freels, Manager
Regulatory Affairs
State Liaison Officer, State
of Ohio
Robert E. Owen, Ohio
Department of Health
C. A. Glazer, State of Ohio,
Public Utilities Commission

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Centerior Service Company
Davis-Besse Nuclear Power Station

Docket No. 50-346
License No. NPF-3
EA 96-304

During an NRC inspection conducted on June 24 through July 11, and August 14-15, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the NRC proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

I. Violation Assessed a Civil Penalty

10 CFR Part 50, Appendix R, Section III.G.2 requires, in part, that where cables or equipment, including associated non-safety circuits that could prevent operation or cause maloperation due to hot shorts, open circuits, or shorts to ground, of redundant trains of systems necessary to achieve and maintain hot shutdown conditions which are located within the same fire area outside of primary containment, one of the following means of ensuring that one of the redundant trains is free of fire damage shall be provided: (a) separation of cables and equipment and associated non-safety circuits of redundant trains by a fire barrier having a three hour rating; (b) separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustible or fire hazards; and, fire detectors and an automatic fire suppression system shall be installed in the fire area; or (c) enclosure of cables and equipment and associated non-safety circuits of one redundant train in a fire barrier having a one-hour fire rating; and fire detectors and an automatic fire suppression system shall be installed in the fire area.

10 CFR Part 50, Appendix R, Section III.G.3 requires, in part, that alternative or dedicated shutdown capability be provided where the protection of systems whose function is required for hot shutdown does not satisfy the requirements of Section III.G.2.

Contrary to the above, prior to March 20, 1996, the licensee failed to provide adequate protection to ensure operation of equipment for systems necessary to achieve and maintain hot shutdown conditions or provide alternate or dedicated safe shutdown capability, in that sixteen motor-operated valves, necessary to achieve and maintain hot shutdown conditions, were potentially unable to perform their post-fire safe shutdown function because their control circuits were susceptible to fire induced hot shorts. (01013)

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

II. Violation Not Assessed a Civil Penalty

License Condition 2.C.(4) requires that Toledo Edison implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Updated Safety Analysis Report. Updated Safety Analysis Report Section 9.5.1, "Fire Protection Program," states that the "Fire Hazard Analysis Report (FHAR), which is part of the overall program, documents the analysis that ensures compliance with 10 CFR Part 50, Appendix R, Section III.G.

FHAR Section 8.1.4 requires that all fire barriers separating portions of redundant safe shutdown systems required in the event of a fire shall be operable.

FHAR Section 8.1.4.B requires with one or more of the above fire barriers inoperable in the containment or containment annulus, then

- 1) If the fire barrier(s) is located inside containment then within one hour, establish a fire watch to inspect one side of the affected barrier at least once per eight hours or monitor the containment air temperature at least once per hour utilizing the inlet temperature of one of the operating containment air coolers, or
- 2) If the fire barrier(s) is located inside the containment annulus, then within eight hours, establish a fire watch to inspect one side of the affected barrier at least once per eight hours during Modes 3, 4, 5, or 6. No inspection is required during Modes 1 or 2 due to ALARA concerns.

Contrary to the above, from December 15, 1992, until April 16, 1996, fire barriers (radiant energy shields utilizing Thermo-Lag) located in the containment and containment annulus were inoperable and (1) for the containment, action was not taken within one hour to establish a fire watch to inspect one side of the affected barrier at least once per eight hours or monitor the containment air temperature at least once per hour utilizing the inlet temperature of one of the operating containment air coolers; and (2) for the containment annulus, action was not taken within eight hours to establish a fire watch to inspect one side of the affected barrier at least once per eight hours during Modes 3, 4, 5, or 6. (02014)

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

Pursuant to the provisions of 10 CFR 2.201, Centerior Service Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the

violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved.

If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory

Commission, Region III, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Lisle, Illinois
this 22nd day of October 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

June 13, 1996

EA 96-114

Mr. Thomas J. Maiman
Senior Vice President,
Nuclear Operations Division
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 300
Downers Grove, IL 60515

SUBJECT: QUAD CITIES STATION - UNITS 1 AND 2
NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$50,000
(NRC INSPECTION REPORT NOS. 50-254/96005(DRS); 50-265/96005(DRS))

Dear Mr. Maiman:

This refers to the inspection conducted on February 14 through April 1, 1996, at the Quad Cities Station. The purpose of the inspection was to review the circumstances surrounding the failure to ensure corrective actions to restore design margins to the structural steel for the low pressure coolant injection (LPCI) corner rooms. Commonwealth Edison personnel were aware of the design deficiency for over five years without effective resolution. The report documenting the inspection was sent by letter dated April 11, 1996, and a pre-decisional enforcement conference was conducted on May 1, 1996.

Based on the information developed during the inspection and the information that was provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) and the circumstances surrounding the violations are described in detail in the subject inspection report.

Design organization interface weaknesses in the 1980s allowed modifications to corner room piping supports without evaluating the impact on structural steel loading. Structural steel stress design margins were not met for seismic loading conditions. The affected steel performed an important safety function, namely to support low pressure emergency core cooling system (ECCS) piping and heat exchangers.

We are concerned that the engineering decision process failed to ensure timely action to restore design margins. Commonwealth Edison personnel were aware of the design deficiency since 1991. Subsequent to an August 1995 operability evaluation for both units, Quad Cities management missed an opportunity to ensure more timely resolution of the deficiency. Although initially deciding to address the design deficiency during the Unit 1 refuel outage in early 1996, modifications were subsequently postponed until after the refuel outage. These modifications were restored to the outage scope after timeliness concerns were raised by the NRC.

There were a number of root causes for the violations. Some of these included inadequate turnovers between the multiple cognizant engineers as engineering functions were decentralized, and ineffective interfaces with the multiple architect engineering firms on-site. Because the technical knowledge on-site was not sufficient to recognize complex problems, input from contractors was not always evaluated or challenged. More recently, insufficient engineering management focus on maintaining Final Safety Analysis Report (UFSAR) design margins resulted in a failure to recognize the full safety significance of the deficiency during the decision process which resulted in its untimely resolution.

The failure to promptly correct this design deficiency in the installed structural steel is a significant regulatory concern. Therefore, the violation in Section I of the Notice has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, at Severity Level III.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last 2 years¹, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit was not warranted for identification because the NRC identified the violation. Credit was warranted for your comprehensive corrective actions. Your short term actions included reviewing deficiency backlogs for other UFSAR nonconformances and operability concerns, defining an effective engineering management process, and conducting nonconforming condition process awareness training for engineering managers. Your long term actions will include performing modification design control assessments involving one or two systems, implementing engineering management performance meetings, and conducting nonconforming condition awareness training for all sites.

Therefore, to emphasize the need to identify significant deficiencies requiring prompt corrective actions, and thereafter take such actions, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice in the base amount of \$50,000 for the Severity Level III violation.

Section II of the enclosed Notice describes one violation not assessed a civil penalty involving the failure to report a condition outside the design basis of the plant.

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¹ A Severity Level II violation (identified in August 1994) and \$100,000 civil penalty was issued on October 18, 1994 (EA 94-186); a Severity Level II problem (identified in April 1994) and \$80,000 civil penalty was issued on October 12, 1994 (EA 94-188); two Severity Level III problems (identified in August 1994) and \$100,000 in civil penalties were issued on December 14, 1994, including failure to promptly correct degradation of control rod diaphragms (EA 94-220); and a Severity Level III violation (identified in October 1995) and \$50,000 civil penalty was issued on January 2, 1996, for failure to promptly correct the potential for 480 VAC motor control centers to trip on current overload (EA 95-241).

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

Hubert J. Miller
Regional Administrator

Docket Nos. 50-254; 50-265
License Nos. DPR-29; DPR-30

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalty

cc w/encl: E. Kraft, Site Vice President
J. C. Brons, Vice President,
Nuclear Support
H. W. Keiser, Chief Nuclear
Operating Officer
L. W. Pearce, Station Manager
N. Chrissotimos, Regulatory Assurance
Supervisor
D. Farrar, Nuclear Regulatory
Services Manager
Richard Hubbard
Nathan Schloss, Economist,
Office of the Attorney General
State Liaison Officer
Chairman, Illinois Commerce
Commission
J. R. Bull, Vice President, General &
Transmission, MidAmerican Energy Company
Document Control Desk-Licensing

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Commonwealth Edison Company
Quad Cities Station, Units 1 and 2

Docket Nos. 50-254; 50-265
License Nos. DPR-29; DPR-30
EA 96-114

During an NRC inspection conducted on February 14 through April 1, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

I. Violation Assessed a Civil Penalty

10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to the appropriate levels of management.

Contrary to the above, from September 1991 until February 1996, the licensee failed to promptly identify and correct deficiencies in the Units 1 and 2 structural steel located in the low pressure coolant injection (LPCI) corner rooms. Certain beams and connections exceeded the allowable stresses for Class I building type structures specified in Quad Cities Updated Final Safety Analysis Report (UFSAR) Table 3.8-11, a significant condition adverse to quality. A letter dated September 10, 1991, from the licensee's architect engineer to the Quad Cities Engineering Supervisor documented that during walkdowns 34 pipe supports had been identified which were not included in existing calculations and that some structural steel repairs would be necessary in order to accommodate the structural steel load data that had been collected. The structural steel deficiencies were not appropriately identified and tracked until Problem Identification Form (PIF) No. 95-2256 was written on August 21, 1995, and an Operability Determination was completed on August 25, 1995. In February 1996 the licensee included the modifications to correct the structural steel deficiencies in the Unit 1 refuel outage following NRC expressing timeliness concerns. (01013)

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

II. Violation not Assessed a Civil Penalty

10 CFR 50.73(a)(2)(ii)(B), requires that the licensee submit a Licensee Event Report within 30 days after discovery of any event or condition that resulted in a condition that was outside the design basis of the plant.

Contrary to the above, as of April 1, 1996, the licensee failed to submit a Licensee Event Report within 30 days after discovery on January 6, 1994, that the structural steel in the Unit 1 and 2 LPCI corner rooms was outside the design basis of the plant. (02014)

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

Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved.

If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Lisle, Illinois
this 13th day of June 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

June 13, 1996

EA 96-115

Mr. Thomas J. Maiman
Senior Vice President,
Nuclear Operations Division
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 300
Downers Grove, IL 60515

SUBJECT: DRESDEN STATION - UNITS 2 AND 3
NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$50,000
(NRC INSPECTION REPORT NOS. 50-237/96005(DRS); 50-249/96005(DRS))

Dear Mr. Maiman:

This refers to the inspection conducted on February 14 through April 1, 1996, at the Dresden Station. The purpose of the inspection was to review the circumstances surrounding the failure to ensure corrective actions to restore design margins to the structural steel for the low pressure coolant injection (LPCI) corner rooms. Commonwealth Edison personnel were aware of the design deficiency for over five years without effective resolution. The report documenting the inspection was sent by letter dated April 11, 1996, and a pre-decisional enforcement conference was conducted on May 1, 1996.

Based on the information developed during the inspection and the information that was provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) and the circumstances surrounding the violations are described in detail in the subject inspection report.

Design organization interface weaknesses in the 1980s allowed modifications to corner room piping supports without evaluating the impact on structural steel loading. Structural steel stress design margins were not met for seismic loading conditions. The affected steel performed an important safety function, namely to support low pressure emergency core cooling system (ECCS) piping and heat exchangers.

We are concerned that the engineering decision process failed to ensure timely action to restore design margins. Commonwealth Edison was aware of the design deficiency since 1991. Subsequent to a January 1994 operability evaluation of this issue for both units, the Dresden engineering organization missed several opportunities to ensure more timely resolution of the deficiency. As a result, a refuel outage was conducted on Unit 3 in 1994 without addressing the structural steel design deficiency. In late 1994, corrective action was further postponed due to other emerging issues. The proposed structural steel

modifications were presented for review and approval in late 1995, but the engineering process and management oversight were insufficient to adequately identify the importance of returning the required design margin to the structural steel. Consequently, the modifications were further deferred until after the in-process Unit 2 refuel outage. The Unit 2 modifications were completed during the refuel outage subsequent to the NRC raising questions concerning the significance of the issue and timeliness of corrective actions. Unit 3 will remain uncorrected until the next refuel outage.

There were a number of root causes for the violations. Some of these included inadequate turnovers between the multiple cognizant engineers as engineering functions were decentralized, and ineffective interfaces with the multiple architect engineering firms on-site. Because the technical knowledge on-site was not sufficient to recognize complex problems, input from contractors was not always evaluated or challenged. More significantly and recently, insufficient engineering and management emphasis on maintaining Final Safety Analysis Report (UFSAR) design margins resulted in a failure to recognize the full safety significance of the deficiency during the decision process and resulted in its untimely resolution.

The failure to promptly correct this design deficiency in the installed structural steel is a significant regulatory concern. Therefore, the violation in Section I of the Notice has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, at Severity Level III.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last 2 years¹, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit was not warranted for identification because the NRC identified the violation. Credit was warranted for your comprehensive corrective actions. Your short term actions included reviewing deficiency backlogs for other UFSAR nonconformances and operability concerns, defining an effective engineering management process, and conducting nonconforming condition process awareness training for engineering managers. Your long term actions will include performing modification design control assessments involving one or two systems, implementing engineering management performance meetings, and conducting nonconforming condition awareness training for all sites.

Therefore, to emphasize the need to identify significant deficiencies requiring prompt corrective actions, and thereafter, take such actions, I have been authorized, after consultation with the Director, Office of Enforcement, to

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¹ A Severity Level III violation (identified in February 1994) and \$75,000 civil penalty was issued on May 17, 1994 (EA 94-048) involving failure to promptly correct problems with reactor level instrumentation; a Severity Level III problem (identified in January 1995) and \$100,000 civil penalty was issued on April 5, 1995 (EA 95-030); and a Severity Level III violation (identified in August 1995) and \$50,000 civil penalty was issued on December 5, 1995 (EA 95-214).

issue the enclosed Notice in the base amount of \$50,000 for the Severity Level III violation.

Section II of the enclosed Notice describes one violation not assessed a civil penalty involving the failure to report a condition outside the design basis of the plant.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

Hubert J. Miller
Regional Administrator

Docket Nos. 50-237; 50-249
License Nos. DPR-19; DPR-25

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalty

Distribution:
See attached list

cc w/encl: J. S. Perry, Site Vice President
J. C. Brons, Vice President,
Nuclear Support
H. W. Keiser, Chief Nuclear
Operating Officer
T. Nauman, Station Manager Unit 1
M. Heffley, Station Manager Units 2 and 3
F. Spangenberg, Regulatory Assurance
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Document Control Desk-Licensing

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Commonwealth Edison Company
Dresden Station, Units 2 and 3

Docket Nos. 50-237; 50-249
License Nos. DPR-19; DPR-25
EA 96-115

During an NRC inspection conducted on February 14 through April 1, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

I. Violation Assessed a Civil Penalty

10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to the appropriate levels of management.

Contrary to the above, from 1991 until March 1996, the licensee failed to promptly identify and correct known deficiencies in the Units 2 and 3 structural steel located in the low pressure coolant injection (LPCI) corner rooms. Certain beams and connections exceeded the allowable stresses for Class I building type structures specified in Dresden Updated Final Safety Analysis Report (UFSAR) Table 3.8-11, a significant condition adverse to quality. In 1991, the licensee's architect engineer identified that some of the structural steel connections in the LPCI corner rooms appeared to be above FSAR limits because the original 1966 design analysis had never been updated to include as-built piping loads. The structural steel deficiencies were not appropriately identified and tracked until the licensee committed to modify the Unit 3 structural steel during the next refuel outage (D3R14) in a letter to the NRC dated March 4, 1996. The Unit 2 structural steel modifications were completed during refuel outage D2R14 which was ongoing in March 1996. (01013)

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

II. Violation not Assessed a Civil Penalty

10 CFR 50.73(a)(2)(ii)(B), requires that the licensee submit a Licensee Event Report within 30 days after discovery of any event or condition that resulted in a condition that was outside the design basis of the plant.

Contrary to the above, as of April 1, 1996, the licensee failed to submit a Licensee Event Report within 30 days after discovery on January 6, 1994, that the structural steel in the Unit 2 and 3 LPCI corner rooms was outside the design basis of the plant. (02014)

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

Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved.

If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the

Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Lisle, Illinois
this 13th day of June 1996

August 23, 1996

EA 96-216

Mr. Thomas J. Maiman
Senior Vice President
Nuclear Operations Division
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 300
Downers Grove, Illinois 60515

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$50,000 (NRC INSPECTION REPORT NOS. 50-295/304/96007(DRP))

Dear Mr. Maiman:

This refers to the inspections conducted on January 27 through March 8, 1996, and April 20 through June 7, 1996, at the Zion Nuclear Station. The inspections were conducted to evaluate a series of eight operational errors and unplanned changes to the status of safety-related equipment that occurred between February 8 and May 21, 1996. The reports documenting our inspections and eight apparent violations were sent to you by letter dated April 5 and July 5, 1996. A predecisional enforcement conference was held on July 19, 1995, to discuss the apparent violations, their causes, and your corrective actions. The report documenting the conference was sent to you by letter dated August 6, 1996.

Based on the information developed during the inspection and the information that Commonwealth Edison provided during the predecisional enforcement conference, the NRC has determined that five violations of NRC requirements have occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty and the circumstances surrounding them are described in detail in the subject inspection reports. The violations involved operational errors and unplanned changes to the status of safety-related equipment that occurred during the period February through May 1996.

These violations are of concern because operators made fundamental errors which demonstrated insufficient attention to detail during the performance of required duties and the corrective actions to prevent recurrence were either ineffective or untimely. Specifically, a series of personnel errors and inadvertent entries into Technical Specification Limiting Condition for Operations (LCOs) occurred during the four month period beginning in February of this year. For example, operators repeatedly misaligned safety-related equipment and changed equipment operating status without following procedures applicable for the equipment. A contributing factor to these errors was the absence of supervision in the field to monitor operations and maintenance personnel and provide guidance during the performance of safety-related activities.

Some of these violations are indicative of recurrent errors where Commonwealth Edison has not implemented effective corrective actions. For example, a similar valve lineup error for an OB lake discharge tank overflow event in January occurred in July 1996 involving service water for the emergency diesel generators. Additionally, an identical error involving mis-operation of an emergency diesel generator control rheostat in May reoccurred in July 1996.

These violations are similar to concerns documented in the NRC's most recent Systematic Assessment of Licensee Performance (SALP) report dated February 15, 1996. In the functional area of operations, performance was characterized as inconsistent, primarily due to the frequent occurrence of personnel errors caused by a lack of attention to equipment status. These personnel errors have continued, reinforcing our conclusion that these errors and the lack of effective actions by the Zion Station staff are of significant concern.

The violations collectively represent a significant regulatory concern and, therefore, in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," (Enforcement Policy) NUREG-1600 (60 FR 34381, June 30, 1995), the violations have been classified in the aggregate as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III problem. Where there has been escalated enforcement within the last 2 years¹, Section VI.B.2 of the NRC Enforcement Policy requires consideration of credit for both *Identification* and *Corrective Action*. Credit was given for identification because Commonwealth Edison identified each of the violations. However, credit was not warranted for corrective actions. Although in the enforcement conference, a number of corrective actions were discussed, the Zion staff was unable to show a nexus between the root cause of the specific violation discussed and the corrective actions that were implemented or planned. In addition, specific corrective actions to control equipment and personnel errors were neither prompt nor comprehensive. For example, as of May 1996, your corrective actions to reenforce expectations for non-licensed operators subsequent to an OB lake discharge tank overfill event in January were not promptly completed. Consequently, another event occurred due to a valve lineup error on May 19, 1996, when the 2A diesel generator was run without service water. Following the trip of the 2A diesel generator due to operator error on May 19, 1996, comprehensive corrective actions were not taken to preclude recurrence of this type of error, as evidenced by a nearly identical error occurring in July 1996 involving the 2B diesel generator.

Therefore, to emphasize the importance of operator attention to equipment status and of prompt and comprehensive correction of violations and in recognition of your previous enforcement action, I have been authorized, after

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¹ A Severity Level III problem (identified in June 6, 1995) regarding 7 failures to meet Technical Specification surveillance requirements was issued on September 11, 1995; a Severity Level III problem (identified in September 1995) and \$50,000 civil penalty was issued on November 18, 1995 (EA 95-144).

August 23, 1996

consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the base amount of \$50,000 for this Severity Level III problem.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. In your response, Commonwealth Edison should document the specific actions taken in response to each example cited, and indicate how the corrective action for the specific incidents will be broadened to ensure it is effective. On August 9, 1996, Mr. John Mueller, Site Vice President, requested a management meeting to discuss the initiatives being implemented to resolve these violations. We will schedule a transcribed meeting in the near future following your response to this action. After this meeting and after reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

/s/ A. B. Beach

A. Bill Beach
Regional Administrator

Docket Nos. 50-295; 50-304
License Nos. DPR-39; DPR-48

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalty

Distribution:
See attached list

cc w/encl: J. H. Mueller, Site Vice President
D. A. Sagar, Vice President,
Generation Support
H. W. Keiser, Chief Nuclear
Operating Officer
G. Schwartz, Station Manager
W. Stone, Regulatory Assurance
Supervisor
D. Farrar, Nuclear Regulatory
Services Manager
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Richard Hubbard
Nathan Schloss, Economist
Office of the Attorney General
Mayor, City of Zion
State Liaison Officer, Wisconsin
State Liaison Officer
Chairman, Illinois Commerce Commission

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Commonwealth Edison Company
Zion Nuclear Station
Units 1 and 2

Docket Nos. 50-295; 50-304
License Nos. DPR-39; DPR-48
EA 96-216

During NRC inspections conducted on January 27 through March 8, 1996, and April 20 through June 7, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600 (60 FR 34381, June 30, 1995), the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act) 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

- I. 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," requires that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures or drawings.
  - A. Station Operations Instruction SOI-36J, "Discharge Blowdown Monitor Tanks to Lake Discharge Tank OB," Revision 0, dated May 1, 1992, step 5.5.1 required that valve OAOV-WD0034, "Lake Discharge Tank OB Inlet Valve," be closed and in Step 5.5.2, required that valve OWD-0118, "OB Lake Discharge Tank Inlet," be closed and locked.

Contrary to the above, on January 20, 1996, during discharge of the blowdown monitor tank to the OB lake discharge tank, valves OAOV-WD0034 and OWD-0018 were not closed. (01013)
  - B. Zion Administrative Procedure 1200-08, Risk Significant On-line Maintenance, Revision 4, dated January 4, 1996, requires:
    - In section F.1.d. that the Risk Management Team shall identify compensatory measures and actions required to remove, test or restore the system to service for each voluntary entry into a Limiting Condition for Operation (LCO) or risk significant combination (sic) conditions.
    - In section F.3.a that the Work Control Center preplan and coordinate all work activities by all involved work departments in order to minimize the downtime of out of service system(s) and the risk of losing redundant equipment.
    - In section F.5 that the Work Control Center shall be responsible for initiating Attachment A, "Voluntary LCO Entry Outage Approval Form."

Contrary to the above, the licensee failed to identify compensatory measures and the actions required to remove, test or restore systems to service during risk significant conditions; work activities associated with the maintenance activities were not preplanned or coordinated with all involved work departments to minimize the risk of losing redundant equipment; and the work control center did not initiate Attachment A, "Voluntary LCO Entry Outage Approval Form;" for the maintenance performed on Unit 1 on the 1B service water pump on February 8, 1996; for the maintenance performed on Unit 2 containment electrical penetration Zone 2 on February 12, 1996; and for the maintenance performed on the Unit 2 containment Zone 2 nitrogen and mechanical penetration pressurization systems on February 15, 1996, which required voluntary entry into LCOs. (01023)

- C. Procedure PT-11-DG2A-R, "2A Diesel Generator 24 Hour Loading Test," Revision 1, dated June 16, 1995, the note following step 17 requires that 2HS-AP51 "volts adjust rheostat" be adjusted to maintain 750 KVARs load for the duration of the 2A diesel generator run.

Contrary to the above, on May 19, 1996, during the 2A diesel generator 24 hour loading test, a control room operator adjusted a speed control rheostat instead of the volts adjust rheostat 2HS-AP51 to reduce indicated KVARs, tripping the 2A Diesel Generator. (01033)

- D. PT-11-DG2B, "2B Diesel Generator 24 Hour Loading Test," Revision 5, dated June 16, 1995, section 3.1, requires Diesel Generator required auxiliary systems to be in service for the 2B diesel generator.

Contrary to the above, on May 21, 1996, during the 2B diesel generator 24 hour loading test, the 2B diesel generator service water system, a required auxiliary system, was not in service. (01043)

- E. Licensee Procedure TSGP-156, "Timing and Adjustment of Safeguards Sequence Timers," dated January 8, 1993, requires in section 3.1 that no other safeguards testing be in progress and in section 4.1 that only one section may be performed at a time.

Contrary to the above, on February 10, 1996, while timing and adjusting a Safety Injection Timer, the licensee failed to identify that other safeguards testing was in progress and failed to ensure that only one section was performed at a time when it inadvertently placed both Safety Injection timers (safeguard sequence timers) of Division 247 out of service at the same time. (01053)

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

Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison Company is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violations, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

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

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

matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

The response noted above, should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information).

Dated at Lisle, Illinois
this 23rd day of August 1996

August 13, 1996

EA 96-131

Mr. T. Palmisano
General Manager
Palisades Nuclear Generating Plant
Consumers Power Company
27780 Blue Star Memorial Highway
Covert, Michigan 49043-9530

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$50,000
(NRC Inspection Report No. 50-255/96004(DRS))

Dear Mr. Palmisano:

This refers to the special inspection conducted on March 18 through April 29, 1996, at the Palisades Nuclear Generating Plant. The purpose of the inspection was to review several 10 CFR Part 50, Appendix R, fire protection deficiencies identified by your staff as being outside the design basis of the facility and your immediate and long-term corrective actions for those deficiencies. The report documenting the inspection was sent by letter dated May 20, 1996, and a pre-decisional enforcement conference was conducted on June 21, 1996. The reportable deficiencies were described in seven Licensee Event Reports submitted to the NRC between August 14, 1995, and April 22, 1996.

Based on the information developed during the inspection and the information that your staff provided during the conference, the NRC has determined that a violation of NRC requirements occurred. The violation, which involves your failure to implement prompt and effective corrective action for these deficiencies, is cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) and the circumstances surrounding the violation are described in detail in the subject inspection report.

Specifically, since the first NRC Appendix R inspection was completed at Palisades in September 1986, both NRC inspection activities and your staff's self-assessments have repeatedly identified deficiencies in Palisades' compliance with the requirements of Appendix R. Your staff's corrective actions for identified Appendix R deficiencies were not always timely or effective.

In mid-1994, you initiated the Appendix R Enhancement Program to place an increased emphasis on the identification and resolution of long-standing Appendix R deficiencies at Palisades. On December 13, 1994, your engineering staff met with Region III staff to describe the breadth and depth of your engineering self-assessments, including the Appendix R Enhancement Program. In recognition of the extent of your commitment to identify engineering

issues, in a letter dated February 23, 1995, documenting the December 1994 meeting, we indicated that our inspections would primarily concentrate on a review of the thoroughness of corrective actions to assure resolution of issues.

As a result of the Appendix R Enhancement Program, your staff identified seven safety significant deficiencies that were the focus of our inspection. Our review has indicated that your staff's corrective actions for those issues were not effective and were not implemented within a time-frame consistent with the potential safety significance of the deficiencies. While you implemented a short term corrective action consisting of a compensatory hourly fire watch, your staff did not implement immediate and comprehensive corrective actions which were necessary to have ensured the ability to cope with the worst case fire scenario while long-term corrective actions were being planned and implemented.

Your failure to implement prompt and comprehensive corrective actions was most evident with the lack of circuit fuse coordination in the Emergency Diesel Generator 1-1 potential transformer circuit. Loss of this circuit could have caused a loss of automatic and manual voltage control and rendered the diesel generator inoperable. Once this issue was identified on November 3, 1995, your staff failed to provide adequate guidance to the operators to enable them to promptly identify this condition and take action to recover the diesel generator and mitigate the consequences of this event. Your staff did not implement corrective actions commensurate with the potential safety significance of this issue until after the NRC inspection exit meeting conducted on April 29, 1996.

For five of the seven deficiencies, immediate corrective action consisted of relying on a roving one-hour fire patrol as a compensatory measure for design deficiencies, pending implementation of long-term corrective actions. In each of these cases, your staff either relied or planned to rely solely on this compensatory measure for a significant period of time while your staff completed the Appendix R Enhancement Program. This reliance on roving one-hour fire patrols as interim compensatory measures for several safety significant design deficiencies indicated a lack of sensitivity to implementing immediate corrective actions commensurate with the safety significance of the deficiencies.

Our inspection also revealed that in instances where all corrective actions had been completed, the corrective actions were not sufficiently rigorous to adequately resolve the issues. In the case of the lack of procedural guidance to conduct cold shutdown repairs for the low pressure safety injection pump, the corrective actions were not adequate to isolate a fire induced fault and allow local manual operation of the pump to permit cold shutdown of the facility. In the case of the lack of circuit separation with the emergency diesel generators, the evaluation of the non-rated fire barrier between the Diesel Generator 1-1 room and the air intake plenum was not technically sufficient to demonstrate that the barrier had a fire rating equivalent to the fire loading of the room. The ineffective resolution of these two issues, combined with the poor technical evaluations associated with the potential

spurious operation and damage of alternate shutdown motor-operated valves and the potential improper setting of the low voltage cut-off for the alternate shutdown panel inverter, indicate a lack of technical discipline in applying the corrective action process associated with Appendix R deficiencies.

While the probability of a fire occurring as described in Appendix R is relatively low, the consequences of such an event occurring at Palisades could have been high since the ability to maintain the plant in hot standby, as required by Appendix R, could only have been achieved by significant operator actions, troubleshooting, and repair activities to compensate for the design deficiencies. While you informed us at the enforcement conference that short-term corrective actions have now been initiated, the failure to implement prompt and effective corrective actions for deficiencies in the Appendix R fire protection program is a significant regulatory concern. Therefore, this violation has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, at Severity Level III.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last two years¹, the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit was not warranted for identification because the NRC identified the corrective action violation.

However, credit was warranted for Palisades' planned and completed corrective actions initiated following NRC identification of the corrective action weaknesses. These included, but were not limited to: 1) reviewing the corrective action process, including all open condition reports and all corrective actions, for appropriateness of compensatory measures; 2) providing "Group Think" training to managers; 3) scheduling lessons learned training to be completed prior to November 1996; 4) revising the plant modification process to strengthen fire protection and Appendix R review criteria; 5) modifying the Emergency Diesel Generator 1-1 potential transformer circuit; 6) providing the operators with augmented procedural guidance and spare parts for cold shutdown repair of the low pressure safety injection pumps; and 7) establishing a periodic surveillance procedure to test the alternate shutdown panel inverter low voltage cut-off setpoint. Further, Palisades staff finalized schedules for modifications to coordinate the main power fuses with the branch circuit breakers for the 125 volt DC panels, to improve emergency lighting in certain areas of the plant, and to eliminate the potential for fire induced control circuit damage on alternate shutdown motor-operated valves.

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¹ A Severity Level III problem (identified in October 1994) and \$25,000 civil penalty was issued on December 13, 1994 (EA 94-222); and a Severity Level III problem (identified in August 1995) was issued on September 29, 1995 (EA 95-169).

August 13, 1996

Therefore, to emphasize the need to initiate prompt and effective corrective action for significant deficiencies, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) in the base amount of \$50,000 for the Severity Level III violation.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

/s/ A. B. Beach

A. Bill Beach
Regional Administrator

Docket No. 50-255
License No. DPR-20

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalty

cc w/encl: R. A. Fenech, Vice President,
Nuclear Operations
R. W. Smedley, Manager,
Licensing Department
James R. Padgett, Michigan Public
Service Commission
Michigan Department of Public Health
Department of Attorney General (MI)

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Consumers Power Company
Palisades Nuclear Generating Plant

Docket No. 50-255
License No. DPR-20
EA 96-131

During an NRC inspection conducted from March 18 through April 29, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violation and associated civil penalty are set forth below:

Palisades Nuclear Generating Plant Operating License, DPR-20, Amendment No. 171, Section 2.2.C.(3), requires in part, that the licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the SERs dated September 1, 1978, March 19, 1980, February 10, 1981, May 26, 1983, July 12, 1985, January 29, 1986, December 3, 1987, and May 19, 1989.

Administrative Procedure 9.48, "Fire Protection Plan," Section 6.0, which is contained in the Fire Protection Program Report as described in the Final Safety Analysis Report, Section 9.6.1.2, requires in part, that the Quality Assurance Program described in CPC-2A, "Quality Program Description for Operational Nuclear Power Plants," will be applied to fire protection activities associated with Q-listed structures, systems, and components for corrective action.

Consumers Power Company Quality Assurance Topical Report CPC-2A, "Quality Program Description for Operational Nuclear Power Plants," Revision 15, requires in part, that conditions adverse to quality of structures, systems, components, or activities are identified promptly and corrected as soon as practical. For significant conditions adverse to quality, the cause of the condition is to be determined and corrective action taken to preclude repetition.

10 CFR Part 50, Appendix R, Section III.G.2, requires in part, that for cables or equipment of redundant trains of systems necessary to achieve and maintain hot shutdown conditions which are located within the same fire area outside of primary containment, one of the following means of ensuring that one of the redundant trains is free of fire damage shall be provided: (a) separation of cables and equipment and associated non-safety circuits of redundant trains by a fire barrier having a three hour rating; (b) separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustible or fire hazards; and, fire detectors and an automatic fire suppression system shall be installed in the fire area; or (c) enclosure of cables and equipment and associated non-safety circuits of one redundant train in a fire barrier having a one-hour fire rating; and fire detectors and an automatic fire suppression system shall be installed in the fire area.

10 CFR Part 50, Appendix R, Section III.G.3, requires in part, that alternative or dedicated shutdown capability be provided where the protection of systems whose function is required for hot shutdown does not satisfy the requirements of Section III.G.2.

10 CFR Part 50, Appendix R, Section III.J, requires emergency lighting units with at least an eight-hour battery power supply shall be provided in all areas needed for operation of safe shutdown equipment and in access and egress routes thereto.

10 CFR Part 50, Appendix R, Section III.L.1, requires in part, that alternative or dedicated shutdown capability provided for a specific fire area shall be able to (a) achieve and maintain subcritical reactivity conditions in the reactor; (b) maintain reactor coolant inventory; (c) achieve and maintain hot standby conditions; (d) achieve cold shutdown conditions within 72 hours; and (e) maintain cold shutdown conditions thereafter.

10 CFR Part 50, Appendix R, Section III.L.5, requires in part, that equipment and systems comprising the means to achieve and maintain cold shutdown conditions shall not be damaged by fire; or the fire damage to such equipment and systems shall be limited so that the systems can be made operable and cold shutdown can be achieved within 72 hours. Materials for such repairs shall be readily available on site and procedures shall be in effect to implement such repairs.

10 CFR Part 50, Appendix R, Section III.L.7, requires in part, that safe shutdown equipment and systems for each fire area shall be known to be isolated from associated non-safety circuits in the fire area so that hot shorts, open circuits, or shorts to ground in the associated circuits will not prevent operation of the safe shutdown equipment.

Contrary to the above, the licensee failed to promptly correct significant conditions adverse to quality for Q-listed fire protection systems and equipment, as evidenced by the following examples:

- A. From November 3, 1995, through April 29, 1996, the licensee failed to implement timely and effective corrective actions for previous NRC and licensee-identified noncompliances with the requirements of 10 CFR Part 50, Appendix R, in that, the facility's alternate shutdown emergency AC power source, Diesel Generator 1-1, was not properly isolated from associated circuits. Specifically, the Diesel Generator 1-1 potential transformer circuit primary and secondary fuses were not properly coordinated which could have caused the loss of automatic and manual voltage control and rendered Diesel Generator 1-1 inoperable. Although this deficiency was identified on November 3, 1995, the licensee failed to provide adequate guidance to the operators which would have enabled them to promptly identify this condition and to take the necessary actions to recover the diesel generator and mitigate the consequences of this event.
- B. From July 28, 1995, through March 27, 1996, the licensee failed to implement timely and effective corrective actions for previous NRC and licensee identified noncompliances with the requirements of

- 10 CFR Part 50, Appendix R. Specifically, procedures did not exist to conduct cold shutdown repairs to restore a low pressure safety injection pump following a fire in the east engineered safeguards room, Fire Area 10, or in the 590' corridor auxiliary building, Fire Area 13. The licensee's corrective actions, which were completed on December 1, 1995, consisting of proceduralizing the necessary repairs to allow local manual operation of the breaker were not adequate to isolate a fire induced fault and to allow local manual operation of a low pressure safety injection pump to permit cold shutdown of the facility.
- C. From February 28, 1992, through April 29, 1996, the licensee failed to implement timely and effective corrective actions for safe shutdown motor-operated valve circuits, which could have been affected by fire induced hot shorts as described in NRC Information Notice (IN) 92-18, "Potential for Loss of Remote Shutdown Capability During a Control Room Fire." Specifically, in response to this IN, the licensee had performed three different safety evaluations which were not adequate to identify which motor-operated valves were susceptible to damage by this failure mechanism. In addition, since the most recent evaluation completed on December 19, 1995, no specific guidance was provided to the operators to enable them to quickly identify this condition and take appropriate actions to mitigate the consequences of this event.
- D. From July 14, 1995, through April 29, 1996, the licensee failed to implement timely and effective corrective actions for previous NRC and licensee identified noncompliances with the requirements of 10 CFR Part 50, Appendix R. Specifically, on July 14, 1995, the licensee determined that Emergency Diesel Generator 1-2 power and control circuits were not adequately separated. The licensee's corrective action for this condition, an analysis to determine an effective rating for the barrier between the redundant trains, EA-FPP-95-047, "Analysis of the Effects of a Fire on the Barriers Between Diesel Generator Room 1-1 and the East Air Plenum Room," dated November 14, 1995, which concluded the configuration was acceptable, was not adequate, in that: (1) the analysis did not consider all possible failure modes for an operating diesel or operating modes of the diesel room ventilation system; (2) the analysis did not evaluate the potential impact of degraded or inoperable suppression systems; and (3) the methodology utilized to evaluate the fire severity was not conservative.
- E. From September 27, 1995, through April 29, 1996, the licensee failed to implement timely and effective corrective action for the improper setting of the Alternate Shutdown Panel Inverter low voltage cut-off setpoint. Specifically, the safety significance of this setpoint was not recognized; the condition report initiated due to the inverter failure was not comprehensive which resulted in a cursory evaluation of the condition and a failure to recognize the safety significance and reportability of the deficiency; and the adjustment of this setpoint was performed without an engineering evaluation or the use of any setpoint methodology.
- F. From February 2, 1996, through April 29, 1996, the licensee failed to implement timely and effective corrective actions for previous NRC and

licensee identified noncompliances with the requirements of 10 CFR 50, Appendix R. Specifically, the main supply fuses for the 125 Volt D.C. panels, ED-11-1 and ED-21-1, were not properly coordinated with the branch circuit breakers. This condition was identified on February 2, 1996, but effective corrective action had not been taken to correct this deficiency as of April 29, 1996.

- G. From November 14, 1986, through April 29, 1996, the licensee failed to implement timely and effective corrective actions for emergency lighting deficiencies identified by the NRC during an Appendix R inspection completed in September 1986, and during a follow-up inspection completed in June 1988. Specifically, as of April 29, 1996, adequate emergency lighting had not been provided for the necessary illumination of: (1) Panel ED-21-2 in the cable spreading room and (2) the condenser air ejection pump in the west mezzanine of the turbine building. (01013)

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

Pursuant to the provisions of 10 CFR 2.201, Consumers Power Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved.

If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why

the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Lisle, Illinois,
this 13th day of August 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

September 6, 1996

EA 96-274

J. W. Yelverton, Vice President Operations
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, Arkansas 72801-0967

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$50,000 (NRC Inspection Report No. 50-313/96-21; 50-368/96-21)

Dear Mr. Yelverton:

This is in reference to the matters discussed at a predecisional enforcement conference conducted on August 26, 1996, at the NRC's Arlington, Texas office. The conference was conducted to discuss apparent violations related to a May 19, 1996 event at Arkansas Nuclear One, Unit 1, during which a main steam safety valve (MSSV) failed to reseal following a reactor trip, resulting in one of two steam generators boiling dry and the declaration of an unusual event. The apparent violations were described in the referenced inspection report, issued on August 12, 1996. The results of an Augmented Inspection Team (AIT) follow-up to this event were described in a previous inspection report, 50-313/96-19; 50-368/96-19, issued on June 12, 1996. A conference summary, including the materials Entergy Operations, Inc., made available at the conference, was sent to you and to the NRC's Public Document Room on September 4, 1996.

Based on the information developed during the inspection and the information that you provided during the conference, the NRC has determined that violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty. The circumstances surrounding them were described in detail in the subject inspection reports. Briefly, the violations involve a failure to assure that maintenance procedures were adequate to assure proper reassembly of MSSV components following testing, and a failure on the part of the mechanics involved in this activity to assure that the results intended by the procedures were attained, i.e., the proper installation of cotter pins through slots in the MSSV release nuts. I do want to note that in addition to the apparent violations specifically discussed at the conference, Violation B includes the failure of the mechanics to stop work when they recognized that they could not obtain full engagement of the cotter pins through the release nut slots on some of the MSSVs.

These violations resulted in one MSSV failing to reseal after a reactor trip on May 19, 1996, causing one of two steam generators to boil dry and removing it, albeit temporarily, as a source of cooling for the reactor. As documented in the inspection reports, operating personnel at ANO Unit 1 responded well to this event and the challenges created by it. Nonetheless, the failure of this MSSV to reseal substantially complicated the recovery from this event.

Furthermore, it was determined subsequent to this event that the cotter pins on at least two additional MSSVs were not fully engaged, and that the performance of the involved maintenance procedures prior to this event did not provide assurance that the cotter pins would be properly engaged. Thus, there was a potential, prior to the discovery and correction of this problem, for this same failure mechanism to have affected both steam generators, which would have presented a more difficult challenge to plant operators.

Entergy's presentation at the conference indicated that the primary root cause of the MSSV malfunction on May 19 was a failure to adhere to procedural requirements, but noted that a number of dimensional variations in the manufacture of the MSSV components created competing requirements in performing the procedure. Entergy's corrective actions in response to this event included, but were not limited to, inspecting all 16 MSSVs at ANO Unit 1, modifying the release nut slots to assure adequate room for proper engagement, modifying the procedures to eliminate the competing requirements and to include a caution statement, discussing this event with all maintenance personnel and other site personnel, communicating with the industry on this event, and ultimately removing manual lift levers and associated release nuts from the Unit 1 MSSVs when it was determined that they were not required. In addition, the mechanical supervisor and craft personnel voluntarily discussed this event with their peers at other Entergy plants.

As discussed during the conference, this event was preventable in two respects. The most significant opportunity to have prevented this event rested with the mechanics who were performing the MSSV reassembly following testing. They should have documented the fact that full engagement of the cotter pins could not be attained in all cases when the exact specifications in the procedure were followed, and stopped work pending resolution of this problem. The other opportunity to have prevented this event involves Entergy's review of a report of a similar failure mechanism at the Crystal River plant which had resulted in a MSSV not fully closing. Based on the discussions during the conference, the NRC agrees with Entergy that it is not clear that a timely review of this report would have resulted in the discovery of the problem that caused the May 19 event at ANO. Notwithstanding that consideration, the NRC expects licensees to perform timely reviews of important industry communications and that did not occur in this case.

The NRC has classified these violations in the aggregate, in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III problem. In accordance with the Enforcement Policy, a civil penalty is considered for a Severity Level III problem, with a base value of \$50,000. Because your facility has been the subject of escalated enforcement action within the last 2 years,¹ the NRC considered whether credit was warranted for *Identification*

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¹ For example, on July 17, 1995, a Notice of Violation was issued for a Severity Level III problem involving a number of violations associated with the movement of the Unit 1 core support assembly.

and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. The NRC has determined that credit for identification is not warranted because the violations were discovered as the result of the May 19 event and because there were missed opportunities to discover this problem earlier and prevent the event from occurring. As discussed above, the most significant missed opportunity was the failure of the mechanics themselves to identify problems in performing the procedure. The NRC has determined that credit for corrective actions is warranted, based on Entergy's prompt actions in ferreting out the root cause of the event, and subsequent actions to address all of the hardware and human performance problems revealed by this event.

Therefore, to emphasize the importance of proper maintenance on safety-related components, including the need to identify problems encountered during the performance of such maintenance, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) in the base amount of \$50,000 for the Severity Level III problem described above and in the Notice.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

L. J. Callan
Regional Administrator

Docket Nos.: 50-313; 50-368
License Nos.: DPR-51; NPF-6

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalty

cc w/Enclosure: see next page

Entergy Operations, Inc.

-4-

cc w/Enclosure:

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& Chief Operating Officer
Entergy Operations, Inc.
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Vice President
Operations Support
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County Judge of Pope County
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Bernard Bevill, Acting Director
Division of Radiation Control and
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Manager
Rockville Nuclear Licensing
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1700 Rockville Pike, Suite 525
Rockville, Maryland 20852

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Entergy Operations, Inc.
Arkansas Nuclear One, Unit 1

Docket Nos. 50-313; 50-368
License Nos. DPR-51; NPF-6
EA 96-274

During an NRC inspection conducted July 12 to August 2, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

- A. Unit 1 Technical Specification 6.8.1.a states, in part, that written procedures shall be established, implemented and maintained covering the applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, November, 1972.

Paragraph I.1 of Regulatory Guide 1.33 states, in part, that maintenance which can affect the performance of safety-related equipment should be performed in accordance with written procedures appropriate to the circumstances.

Procedure 1306.017, "Unit 1 Main Steam Safety Valve Test," revision 11 for the testing and restoration of the Unit 1 Main Steam Safety Valves. Step 8.2.22 requires, in part, that the bottom of the release nut should clear the top of the lever by 1/16 to 1/8 inches and that a new stainless steel cotter pin be inserted through the release nut slots and spindle.

Contrary to the above, as of May 19, 1996, Procedure 1306.017 was not appropriate to the circumstances for Valves PSV-2684, -2685 and -2695, in that the cotter pin could not be installed through the release nut slots and spindle if the bottom of the release nut cleared the top of the lever by 1/16 to 1/8 inches.

- B. Unit 1 Technical Specification 6.8.1.a states, in part, that written procedures shall be established, implemented and maintained covering the applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, November, 1972.

Paragraph I.1 of Regulatory Guide 1.33 states, in part, that maintenance which can affect the performance of safety-related equipment should be performed in accordance with written procedures appropriate to the circumstances.

Procedure 1000.006, "Procedure Control," Step 6.5.1 of requires, in part, that procedures shall be performed exactly as written. Step 6.5.4 requires, in part, that if problems occur during procedure performance due to unexpected results, the user shall stop work.

Procedure 1306.017, "Unit 1 Main Steam Safety Valve Test," revision 11, for the testing and restoration of the Unit 1 Main Steam Safety Valves. Step 8.2.22, requires, in part, to insert a new stainless steel cotter pin through the release nut slots and that a second person verifier shall verify that the cotter pin has been installed properly.

Contrary to the above, as of May 19, 1996, for Valves PSV-2684, -2685, and -2695, Procedure 1000.006 had not been performed exactly as written in that the cotter pins were found not inserted through the release nut slots and the second person verifier had not verified that the cotter pins were properly installed. In addition, Procedure 1000.006 had been performed on Valves PSV-2684, PSV-2685, and PSV-2695 with unexpected results and the users did not stop work.

These violations represent a Severity Level III problem (Supplement I).
Civil Penalty - \$50,000

Pursuant to the provisions of 10 CFR 2.201, Entergy Operations, Inc. (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation(s) listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the

civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Arlington, Texas,
this 6th day of September 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

JUL 16 1996

EA 96-051

Florida Power and Light Company
ATTN: Mr. T. F. Plunkett
President - Nuclear Division
P. O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$100,000 (Department of Labor Case No. 92-ERA-010)

Dear Mr. Plunkett:

This refers to the Secretary of Labor Decision and Remand Order (Decision) issued on January 19, 1996, in Department of Labor (DOL) Case No. 92-ERA-010, Regino R. Diaz-Robainas vs. Florida Power and Light Company. The Secretary of Labor reversed previous DOL decisions by the DOL Area Director and DOL Administrative Law Judge and concluded that Florida Power and Light Company (FP&L) discriminated against Mr. Diaz-Robainas, a former FP&L employee, when he was terminated on August 19, 1991, for his failure to submit to a psychological evaluation which was ordered by FP&L in retaliation for his engaging in protected activities. The Secretary of Labor found that Mr. Diaz-Robainas' protected activities included: (1) identification of various technical issues involving safety concerns, regarding projects with which he was associated; (2) various verbal complaints to management alleging he was being discriminated against for identifying safety concerns; and (3) assertions made to FP&L management that he would go to the media and the Nuclear Regulatory Commission (NRC). The Secretary of Labor denied your Motion for Reconsideration by Order dated April 15, 1996.

In a letter dated March 25, 1996, the NRC described the apparent violation and transmitted a copy of the Secretary of Labor's Decision to you and provided you an opportunity to either respond to the apparent violation in writing or request a predecisional enforcement conference. In your April 24, 1996, response, you requested a predecisional enforcement conference, denied the violation, and stated that no corrective actions were required; however, you did refer to recent FP&L initiatives designed to ensure that employees feel free to raise safety concerns. A predecisional enforcement conference regarding this matter was conducted in the Region II office on June 14, 1996. This conference was closed to public observation and was transcribed. A letter summarizing the conference was sent to you by letter dated June 21, 1996.

Based on the information developed by the Secretary of Labor, the information provided in your April 24, 1996 letter, and the information you presented at the conference, the NRC has determined that a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) and involves the failure of FP&L to adhere to the requirements of 10 CFR 50.7, Employee Protection, which

prohibits discrimination against employees for engaging in protected activities. At the predecisional enforcement conference, FP&L denied the violation stating that Mr. Diaz-Robainas' referral to a psychologist to undergo a fitness-for-duty evaluation was based on a pattern of declining performance and behavioral observations, and he was terminated for direct insubordination for refusing to comply with the referral order. Despite your denial, the NRC adopts the Secretary of Labor's decision in this case and finds that the action taken against Mr. Diaz-Robainas was an act of discrimination for his having engaged in protected activities. The Secretary of Labor's decision is based on his analysis of the DOL adjudicatory record and his determination that FP&L's order that Mr. Diaz-Robainas "undergo a psychological evaluation was based solely on retaliatory animus for his protected activity." [92-ERA-010, Decision and Remand Order at 8.] In addition, FP&L had full and complete opportunity to present all relevant evidence before the DOL. Absent any compelling information to refute the Secretary of Labor's conclusion, the NRC finds no basis at this time to challenge the decision.

The NRC recognizes that licensees are required by 10 CFR 73.56 to observe employee behavior in order to detect behavioral changes which could lead to acts detrimental to public health and safety; however, such programs cannot be utilized in retaliation for engaging in protected activities and raising safety concerns. Although at the conference you stated that the DOL decision in this case could result in increased management reluctance to question an individual's fitness-for-duty for fear of legal retribution, the NRC maintains that full compliance with access authorization and fitness-for-duty requirements can be achieved through effectively implemented and safety-motivated programs. NRC agrees with the Secretary of Labor's findings in this particular case, as described in his Order dated April 15, 1996, denying your Motion for Reconsideration, that "this decision does not undermine the employer's duty to participate in the NRC's behavioral observation program and to refer or remove an employee whose fitness it questions."

While any discrimination against a person for engaging in protected activities is cause for concern to the NRC, this violation is of very significant regulatory concern because it involved discrimination by a member of management above first-line supervision. The NRC places a high value on the freedom provided to nuclear industry employees to raise potential safety concerns to their management and to the NRC. Therefore, this violation has been categorized in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, at Severity Level II.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$80,000 is considered for a Severity Level II violation. In this case, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. The NRC determined that credit for *Identification* was not appropriate because the violation was identified by the DOL and not by the licensee. In your letter of April 24, 1996, and at the conference, you stated that corrective actions were not required because no violation occurred and that existing programs have been effective in assuring

that employees feel free to raise safety concerns. However, you indicated that the following actions had been initiated recently regarding the FP&L Employee Concerns Program: (1) you reaffirmed management expectations in this area by issuance of a memorandum dated December 11, 1995 (DOL Case No. 94-ERA-53, Gary Phipps vs. Florida Power and Light Company); (2) in early 1996, selected FP&L managers were trained on handling employee concerns; and (3) an independent assessment of the Employee Concerns Program was conducted. Notwithstanding these actions, the NRC has determined that credit is not warranted for the factor of *Corrective Action*. Specifically, you have not reinstated Mr. Diaz-Robainas as directed in the Decision and Remand Order of the Secretary of Labor. We recognize that there is some question whether the Secretary's Order with regard to reinstatement and assessment of damages is final or immediately enforceable; however, we are concerned that lack of compliance with the Secretary of Labor's Order may itself have a chilling effect on other employees.

Based on the severity level of the violation and NRC's determinations regarding *Identification* and *Corrective Action*, a civil penalty in the amount twice the base would normally be assessed. However, consistent with Section 234 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2282, the maximum civil penalty for a single violation may not exceed \$100,000 per day. Therefore, to emphasize the importance of ensuring that employees who raise real or perceived safety concerns are not subject to discrimination for raising those concerns and that every effort is made to provide an environment in which all employees may freely identify safety issues without fear of retaliation or discrimination, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the maximum amount of \$100,000 for the Severity Level II violation.

At the conference you stated that FP&L has appealed the Secretary of Labor's Decision in this case to the United States Court of Appeals for the Eleventh Circuit. In view of the judicial appeal in this case, NRC has determined that it is appropriate to defer your submittal of a written response to the Notice and payment of the associated civil penalty pending the outcome of the appeal in this case. Accordingly, FP&L may defer written response and payment of the proposed civil penalty until 30 days after judicial review of this case is completed and a decision based on the review is issued. In the interim, FP&L should keep the NRC informed of the status of the appeal and provide copies of the briefs and any other filings in the case to the Director, Office of Enforcement. In addition, if the case is successfully appealed and the Secretary of Labor's Decision is reversed, the NRC will reconsider this enforcement action at that time.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and any response you may provide will be placed in the NRC Public Document Room (PDR). Any response that is provided, to the extent possible, should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should

clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Sincerely,

Stewart D. Ebnetter
Regional Administrator

Docket Nos. 50-250, 50-251
License Nos. DPR-31, DPR-41

Enclosure: Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
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Vice President, Engineering
Commonwealth Edison Company
Executive Towers West III
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H. N. Paduano, Manager
Licensing & Special Programs
Florida Power and Light Company
P. O. Box 14000
Juno Beach, FL 33408-0420

Plant General Manager
Turkey Point Nuclear Plant
P. O. Box 029100
Miami, FL 33102

R. J. Hovey
Site Vice President
Turkey Point Nuclear Plant
P. O. Box 029100
Miami, FL 33102

G. E. Hollinger
Licensing Manager
Turkey Point Nuclear Plant
P. O. Box 4332
Miami, FL 33032-4332

cc w/encl: (Cont'd on Page 5)

cc w/encl (Cont'd):
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Steel, Hector and Davis
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Attorney General
Department of Legal Affairs
The Capitol
Tallahassee, FL 32304

Bill Passetti
Office of Radiation Control
Department of Health and
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Jack Shreve, Public Counsel
Office of the Public Counsel
c/o The Florida Legislature
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Armando Vidal
County Manager of Metropolitan
Dade County
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Joe Myers, Director
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Department of Community Affairs
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Lydel L. Erwin, District Director
U.S. Department of Labor
Employment Standards Administration
Wage and Hour Division
299 East Broward Blvd, Suite 407
Fort Lauderdale, FL 33301

cc w/encl: (Cont'd on Page 6)

cc w/encl (Cont'd):
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Administrative Law Judge
Office of Administrative Law Judges
800 K Street, N.W., Suite 400
Washington, D.C. 20001-8002

Gail Coleman
Deputy Associate Solicitor
Division of Fair Labor Standards
Office of the Solicitor
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Florida Power and Light Company
Turkey Point Nuclear Plant

Docket Nos. 50-250, 50-251
License Nos. DPR-31, DPR-41
EA 96-051

As a result of review of a Secretary of Labor Decision and Order of Remand dated October 23, 1995, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violation and associated civil penalty are set forth below:

10 CFR 50.7 prohibits discrimination by a Commission licensee against an employee for engaging in certain protected activities. Discrimination includes discharge or other actions relating to the compensation, terms, conditions, and privileges of employment. The activities which are protected include, but are not limited to, reporting of safety concerns by an employee to his employer or the NRC.

Contrary to the above, the Florida Power and Light Company (FP&L) discriminated against Mr. Regino R. Diaz-Robainas for engaging in protected activities. Specifically, as determined by the Secretary of Labor, on August 19, 1991, FP&L terminated Mr. Diaz-Robainas for his failure to submit to a psychological evaluation which was ordered by FP&L on July 30 and August 19, 1991, in retaliation for his having engaged in protected activities. Mr. Diaz-Robainas' protected activities, among other things, included the identification and reporting of safety concerns during the period of February through August 1991. (01012)

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

Pursuant to the provisions of 10 CFR 2.201, Florida Power and Light Company is hereby required to submit a written statement or explanation regarding the this Notice of Violation and Proposed Imposition of Civil Penalty (Notice) to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days after judicial review of this case is completed and a decision based on the review is issued. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be

Notice of Violation and Proposed   2
and Imposition of Civil Penalty

taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: Mr. James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II and a copy to the NRC Resident Inspector at the Turkey Point facility.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you

Notice of Violation and Proposed   3
and Imposition of Civil Penalty

should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Atlanta, Georgia
this 16th day of July 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

JUL 10 1996

EA 95-126

Mr. P. M. Beard, Jr.
Senior Vice President, Nuclear
Operations (SA2A)
ATTN: Manager, Nuclear Licensing
Florida Power Corporation
Crystal River Energy Complex
15760 West Power Line Street
Crystal River, Florida 34428-6708

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES -
\$500,000
(NRC Inspection Report Nos. 50-302/95-13 and 50-302/95-22 and
Investigation Report Nos. 2-94-036 and 2-94-036S)

Dear Mr. Beard:

This refers to investigations conducted by the Nuclear Regulatory Commission (NRC) Office of Investigations (OI) completed on May 24, 1995, and February 13, 1996; and NRC inspections conducted during the period September 5, 1994, through December 15, 1995, and documented in NRC Inspection Report Nos. 50-302/95-13 and 50-302/95-22. These inspection reports also summarize related findings discussed in NRC Inspection Report Nos. 50-302/94-22, 95-02, 95-07, 95-08 and 95-09. During these reviews, the NRC examined the facts and circumstances surrounding events involving control of the pressure and level for the reactor coolant system (RCS) make-up tank (MUT) between June 1994 and September 1994 and reviewed the adequacy of design control and corrective actions that affected operability of emergency core cooling system (ECCS) pumps. By letters dated July 7, 1995, and March 8, 1996, you were provided synopses of the OI investigation reports in this case and given an opportunity to attend a predecisional enforcement conference to discuss the apparent violations, their cause, and the corrective actions to preclude recurrence. A closed, transcribed conference was conducted on March 27, 1996, in the Region II office in Atlanta, Georgia. A summary of the conference was sent to you by letter dated April 2, 1996. Subsequently, on April 4, 1996, you submitted supplemental information to the NRC regarding information which was not available at the time of the conference.

Based on the information developed during the inspections and investigations as well as the information you provided during the conference and in your subsequent submittal, the NRC has determined that a number of significant violations of NRC requirements occurred. Enclosure 2 contains a Notice of Violation and Proposed Imposition of Civil Penalties (Notice) that describes the violations. The violations are discussed in more detail in Enclosure 1, and the circumstances surrounding them are described in detail in the subject inspection reports and investigation report synopses.

The violations in the Notice are grouped as follows:

Part I contains the violations for which civil penalties have been assessed. Item I.A involves numerous instances in which operating procedures were violated, demonstrating poor performance of the operations department in that operating limits associated with operating procedure OP-103B, Curve 8, were routinely exceeded. While there were numerous instances where operating procedures were violated, the Notice identifies examples in which operating limits were exceeded for more than 30 minutes with some as long as three hours.

Item I.B involves a violation in which a crew of licensed operators conducted unauthorized tests on two separate occasions in an effort to resolve safety concerns that had not promptly been addressed by the licensee.

Item I.C involves two separate violations involving the failure to promptly identify and correct conditions adverse to quality. First, the licensee failed to identify promptly that the operating curve questioned by licensed operators was, in fact, nonconservative and, second, the licensee's first three attempts at corrective action were inadequate.

Item I.D consists of two separate violations involving inadequate performance by engineering in design control. The first violation involves the issuance of an inaccurate, nonconservative, design basis curve to operators to be used as an operating curve. The second violation involves the use of an inaccurate, nonconservative setpoint for the swap over of the suction for emergency core cooling system pumps from the borated water storage tank to the reactor building sump.

Part II consists of additional violations that were not assessed a civil penalty: an additional Severity Level III violation for inadequate design control and two Severity Level IV violations.

Although these violations did not result in any actual impact on the public health and safety, the circumstances surrounding these violations represent significant regulatory concerns. In particular, licensee management failed to exercise effective oversight in several areas that are each of vital importance in assuring the safe operation of a nuclear facility. Operations management was unaware that essentially all control room shifts were routinely violating an operating curve, yet these violations were being committed in attempts by operators to meet a chemistry goal set by senior management. Furthermore, despite the fact that the safety adequacy of the curve was formally questioned in a problem report by licensed operators, not only did management not require that the safety concern be resolved promptly, but management insisted that the plant be maintained at a hydrogen concentration that resulted in operating on or near the maximum point of the questioned curve during the several months the issue was being considered. The operating environment maintained contributed to the perceived need to conduct the September 4-5, 1994 evolutions to resolve the matter.

Management oversight of engineering failed to ensure that the safety concern raised by licensed operators -- stated by the licensee not to be a routine occurrence -- with an engineering-derived curve was not aggressively pursued with a high degree of rigor. Not only did engineering fail to address the concern promptly, despite the fact that the plant was then operating in the very area of the curve questioned by the operators, but also the conclusion reached by engineering was wrong because calculational assumptions and evaluations failed to consider fundamental principles (e.g., gas absorption). These engineering performance inadequacies are of even greater concern because the questioned curve, although known by some engineers to be a design basis curve, had not been identified to operations as such and was being used as an operating curve even as its safety adequacy was in dispute. Furthermore, once the curve was confirmed to be wrong, the actions taken to correct the problem were repeatedly inadequate.

Corrective action inadequacies were also demonstrated in the licensee's review of the September 5, 1994 evolution. Although several individuals within both the operations and engineering departments had knowledge of a similar evolution conducted on the previous day, the licensee's investigation was limited to interviews only with the two senior reactor operators on shift, and did not identify the occurrence of the previous evolution. A detailed event review and root cause analysis was not performed. Moreover, it was not until August 1995, about a year after the event, that a more comprehensive investigation was conducted into this matter.

The NRC is very concerned about the ineffective management oversight of engineering, operations, and corrective action activities demonstrated by these violations. The NRC expects licensees to promptly address safety concerns, especially those raised by licensed operators, and to resolve them with a high degree of rigor. You did not meet these expectations in this case: managers appeared insensitive to safety concerns and did not aggressively pursue them, engineers overlooked basic scientific principles and produced inaccurate analyses, and investigations failed to identify important case facts and underlying root causes. In consideration of the high regulatory significance that the NRC finds in these violations, I have been authorized, after consultation with the Director, Office of Enforcement, the Deputy Executive Director for Reactor Regulation, Regional Operations and Research, and the Commission, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the total amount of \$500,000 for the violations discussed above. The assessment process for these penalties is more fully discussed in Enclosure 1.

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

necessary to ensure compliance with NRC regulatory requirements. I further note that the NRC is continuing to review whether there were other unauthorized evolutions at Crystal River, and further enforcement actions may be taken if additional violations are identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

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

Sincerely,

Stewart D. Ebner
Regional Administrator

Docket No. 50-302
License No. DPR-72

Enclosures:

- (1) Description of Violations
- (2) Notice of Violation and Proposed Imposition of Civil Penalties

cc w/encls:

Gary L. Boldt, Vice President
Nuclear Production (SA2C)
Florida Power Corporation
Crystal River Energy Complex
15760 West Power Line Street
Crystal River, FL 34428-6708

B. J. Hickie, Director
Nuclear Plant Operations (NA2C)
Florida Power Corporation
Crystal River Energy Complex
15760 West Power Line Street
Crystal River, FL 34428-6708

L. C. Kelley, Director (SA2A)
Nuclear Operations Site Support
Florida Power Corporation
Crystal River Energy Complex
15760 West Power Line Street
Crystal River, FL 34428-6708

cc w/encls: See Next Page

cc w/encs: (Con't)
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MAC - A5A
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Attorney General
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Tallahassee, FL 32304

Bill Passetti
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Department of Health and
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Department of Community Affairs
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Description of Violations

A. Failure to Follow Procedures

Violation A in Part I of the Notice involves nine instances where operators violated plant procedures for maximum MUT overpressure. Specifically, during the period July 23 through September 5, 1994, operators, while adding hydrogen to the MUT for RCS chemistry control, exceeded the maximum MUT overpressure limit as defined by OP-103B, Curve 8 on numerous occasions. In addition, when plant alarms annunciated during these additions, indicating that the overpressure limit had been exceeded, operators failed to take timely action to reduce pressure to within the acceptable operating region. In one case, operation outside of the acceptable region persisted for a period of approximately three hours.

The violation is of significant potential safety consequence, in that, unknown to the operations staff at the time of the violation, OP-103B, Curve 8 was a design basis limit established for the protection of Emergency Safeguards pumps in the event of a loss of coolant accident (LOCA). Had an Engineered Safeguards actuation occurred while the MUT pressure was in the unacceptable region of OP-103B, Curve 8, pump cavitation and subsequent inoperability of one train of high pressure injection (HPI) could have occurred. Your analysis found that the one train of HPI subject to inoperability because of exceeding OP-103B, Curve 8, is necessary equipment for accident mitigation for the specific design basis event of a core flood line LOCA concurrent with a loss of offsite power and the failure of one emergency diesel generator. From a regulatory standpoint, this violation is of substantial concern in that it was indicative of a lack of management awareness of control room activities. Essentially, 100 percent of the licensed operators on shift had exceeded OP-103B, Curve 8, and failed to take timely action in response to a valid alarm, in part, due to management directives to maintain MUT pressure as high as possible to meet chemistry goals for RCS hydrogen concentration, despite voiced and documented operator concerns with maintaining elevated MUT pressure. Therefore, in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, Violation A in Part I of the Notice has been categorized as a Severity Level III violation.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement action within the last two years, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process described in Section VI.B.2 of

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A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$25,000, was issued on March 24, 1995, associated with non-conservative setpoints for safety related equipment (EA 95-016). A Notice of Violation was also issued on February 16, 1994, associated with employee discrimination by a contractor employed by FPC (EA 93-226).

Enclosure 1

the Enforcement Policy. In this case, the NRC has concluded that credit for *Identification* would not be appropriate in that information related to this violation was not identified through your internal company efforts. At the conference, you stated that in direct response to this violation, a new management position was created to focus solely on the oversight and assessment of control room shift operations and administrative procedures for alarm response were revised. You stated further that many of the actions taken in response to the September 4 and 5, 1994, evolutions also served to correct this violation. However, in considering all of the facts in the case, the NRC concluded that credit for the factor of *Corrective Action* is not appropriate in that these actions were not prompt. Specifically, the violation occurred over a significant period of time without detection by FPC management; and following the September 5, 1994, evolution, you failed to fully investigate the operational information available to you to establish the extent of non-compliance with OP-103B, Curve 8, the human factors problems associated with MUT operations, and the existence of an operating environment which contributed to the occurrence of this situation. In view of these facts, a civil penalty of \$100,000, twice the base, is being assessed for this violation.

B. Conduct of Unauthorized Tests

Violation B in Part I of the Notice involves the conduct of unauthorized tests of MUT overpressure without preparation of the required written safety evaluations, contrary to 10 CFR 50.59. On September 4 and 5, 1994, operators planned and executed evolutions, not required by plant conditions, to collect data in order to test the validity of an operating curve, specifically, OP-103B, Curve 8. In performing these unauthorized tests, procedures also were violated when the operators permitted the MUT pressure to exceed the acceptable operating region defined by OP-103B, Curve 8 and failed to take timely action to restore MUT pressure to within limits when a valid alarm was received. In fact, during the evolutions, operators continued to take actions (i.e., decreasing MUT level) which caused MUT pressure to diverge further into the unacceptable region of OP-103B, Curve 8 in order to collect data to support their safety concern. On November 16, 1994, the licensee's evaluation determined that OP-103B, Curve 8 was in error, was non-conservative, and was a design basis limit. Therefore, during these unauthorized tests, the design basis limits for pressure/level of the MUT were exceeded.

Although this violation resulted from the independent actions of a single shift operating crew, FPC as the employer of the operators involved bears responsibility for their actions as employees. FPC also is culpable in this matter because of its failure to recognize and change the operating environment which contributed to the occurrence of the violation. As discussed above, at the time these evolutions occurred, management appeared to accept operators routinely exceeding OP-103B, Curve 8 in order to achieve senior management mandated chemistry control goals. This violation is of substantial concern, not only because a design basis limit was exceeded with its associated potential safety consequences, but also because of FPC's failure to definitively establish limitations on the authority of the Shift

Supervisor and the operating envelope in which he and members of his crew were expected to operate. Therefore, in accordance with the Enforcement Policy, Violation B in Part I of the Notice has been categorized as a Severity Level III violation.

For Violation B in Part I of the Notice, the NRC similarly considered whether credit was warranted for *Identification* and *Corrective Action*. The NRC concluded credit was not warranted for *Identification*, for although you identified the unauthorized test on September 5, 1994, your initial investigation was inadequate to identify the occurrence of September 4, 1994. Despite knowledge by staff in operations and engineering, it was not until June of 1995 that you became aware of the second test. Your more comprehensive investigation conducted in August 1995 should have been conducted much earlier. Your corrective actions following identification of the September 5, 1994, test included: (1) establishment of a Management Review Committee to review the event; (2) counseling of the operations crew involved as well as briefing and enhanced training of all operating crews on the event and management expectations; (3) issuance of standing orders to maintain MUT pressure at a specified margin below OP-103B, Curve 8; and (4) review of other OP-103B curves for operational constraints.

Following identification of the September 4, 1994, test, you took the following actions: (1) formal disciplinary action including termination of the licenses of four of the operators involved in the unauthorized tests; (2) initiation of the August 1995 investigation; (3) procedural changes providing additional guidance on infrequently performed evolutions; (4) reinforcement of logkeeping practices; and (5) additional training for operations personnel on shift supervisor authority. Based on the above, the NRC determined that credit for *Corrective Action* was warranted, which would normally result in a base civil penalty. However, the NRC considers this violation to be of high regulatory significance. Also, your initial investigation failed to determine that an additional test had been performed, and failed to identify that at least one other shift supervisor continued to believe that such evolutions were within the authority of the Shift Supervisor. For these reasons the NRC is exercising discretion in accordance with Section VI.B.2.d of the Enforcement Policy and is assessing a civil penalty of \$100,000 for this Severity Level III violation.

C. Corrective Action Violations

Violations C.1 and C.2 in Part I of the Notice involve your failure to take adequate actions to correct design deficiencies associated with the MUT maximum overpressure curve. Regarding Violation C.1, operators had expressed concerns regarding OP-103B, Curve 8, and the concerns were formally documented in a May 1994 Problem Report (PR) following a failed high pressure injection flow surveillance test. Engineering reviews associated with the PR failed to identify errors and improper assumptions in the OP-103B, Curve 8 calculations. The errors were subsequently identified during engineering evaluations performed following initiation of PR 94-0267 which documented the results of the operators' unauthorized test on September 5, 1994.

This violation was caused by inadequate engineering review of the calculations which formed the basis of OP-103B, Curve 8, and management's ineffectiveness in ensuring that the operations and engineering departments worked together effectively to resolve the documented safety issues regarding OP-103B, Curve 8. At the conference you stated that safety concerns by reactor operators were not routine occurrences. However, instead of promptly and aggressively resolving their concern, the issue persisted without insistence by senior management for resolution. Rather, management continued to focus on maintaining a reactor coolant system hydrogen concentration that resulted in operation at or near the maximum allowable MUT pressure, which contributed to the operators' perceived need to conduct the tests in order to gather the data necessary to support their asserted safety concern. In addition, management's overall ineffectiveness in this matter contributed to continued, periodic operation outside the design basis for routine evolutions. Therefore, in accordance with the Enforcement Policy, Violation C.1 in Part I of the Notice has been categorized as a Severity Level III violation.

In assessing the appropriate civil penalty for Violation C.1 in Part I of the Notice, both *Identification* and *Corrective Action* were considered. It was concluded that credit was not warranted for *Identification* because the NRC identified the violation. Regarding *Corrective Action*, at the conference, you stated that your corrective actions for the violation included: (1) counselling of the engineers involved; (2) initiation of a third party review of design calculations; (3) interdisciplinary review and sign-off of design calculations which included operations and system engineering; (4) formation of a design engineering review board; (5) establishment of a management, single point of accountability for important technical issues; and (6) relocation of design engineering to the site. Although the NRC acknowledges these corrective actions, it was concluded that credit for *Corrective Action* was not warranted. This conclusion was based on the fact that beginning in May 1994 with the issuance of PR 94-0149 ample opportunities existed for appropriately addressing and resolving the safety concern raised by the operators; yet this was not done. Further, had the issues with regard to the PR been resolved satisfactorily, Violation C.2 in Part I of the Notice would have been avoided. Therefore, a civil penalty in the amount of \$100,000 is assessed for this violation.

Regarding Violation C.2, following the September 5, 1994, unauthorized test, two separate short term instructions (STI) were issued to operators requiring MUT pressure to be maintained at a specified margin below OP-103B, Curve 8 in order to ensure the plant was operated within the design basis until a revised curve could be issued. The revised curves, OP-103B, Curves 8A and B were issued on January 30, 1995. However, on January 31, 1995, you again identified that compliance with the STIs and the revised OP-103B, Curves 8A and 8B would not assure operation within the design basis due to a discrepancy between Emergency Operating Procedure (EOP) requirements and the design assumptions for the curves. To ensure an appropriate operating margin, another STI was issued on January 31, 1995, requiring maintenance of MUT pressure 7-11 pounds per square inch below the newly issued OP-103B, Curves 8A and B.

This violation further exemplifies the ineffectiveness of the technical reviews associated with the MUT issue and management's inability to effect the proper and lasting corrective actions necessary for assuring the operability of equipment required to mitigate the consequences of an accident. Therefore, in accordance with the Enforcement Policy, Violation C.2 in Part I of the Notice also has been categorized as a Severity level III violation.

In applying the civil penalty assessment process to Violation C.2 in Part I of the Notice, the NRC determined that credit was warranted for the factor of *Identification* in that the licensee appropriately identified and reported the erroneous STIs and revised Curves 8A and 8B and the potential for further operation outside the design basis. In evaluating *Corrective Action*, the NRC considered the corrective actions previously described for Violation C.1 in Part I of the Notice. Based on this information, the NRC concluded that credit was not warranted for *Corrective Action*, due to the repetitive failures to institute a MUT overpressure curve which was technically correct and appropriately conservative to ensure that the operators could operate within the plant's design basis. Based on these determinations, the base civil penalty normally would be assessed for this violation. However, in consideration of the multiple failures to correct the curve that are indicative of the unacceptable performance of the licensee in resolving this issue, the NRC is exercising discretion in accordance with Section B.2.d of the Enforcement Policy and is assessing a civil penalty of \$100,000 for this Severity Level III violation.

D. Design Control Violations

Violations D.1 and D.2 in Part I and Violation A in Part II of the Notice involve the failure to incorporate the design basis of the ECCS into plant procedures as well as the Final Safety Analysis Report (FSAR). Violation D.1 in Part I of the Notice, involves your failure to assure that, from the time OP-103B, Curve 8 was procedurally established in January 1993 until issuance of the STI on September 9, 1994, an adequate safety margin was provided to ensure the availability of HPI for certain LOCA scenarios. The NRC is particularly concerned with this violation which reflects the inadequate engineering and technical efforts that went into the development of OP-103B, Curve 8. Specifically, evaluations and assumptions which formed the technical basis for the MUT overpressure calculations failed to consider fundamental engineering principles (e.g., gas absorption) which resulted in significant errors in OP-103B, Curve 8. In addition, although known to certain engineers, no one informed operations and personnel using OP-103B, Curve 8 that it was a design basis limit rather than an administrative limit. These violations resulted from fundamental engineering errors and lack of attention to detail and significantly contributed to the other violations described herein; therefore, this violation has been categorized as a Severity Level III violation.

In assessing the civil penalty to be applied to Violation D.1 in Part I of the Notice, the NRC concluded that credit was warranted for *Identification* in that the violation was identified as a result of the licensee's follow-up to PR 94-0267 which documented the results of the

September 5, 1994, unauthorized test. At the conference, you stated that corrective actions for this violation were similar to those instituted for the violations in Part I.C of the Notice. In addition, you issued a revised version of the MUT pressure/level curve on October 5, 1995. Although upon identification of the deficiency you took immediate actions to issue an STI to provide an adequate operating margin for the MUT, the actions were ineffective and required multiple attempts until a revised curve was issued. Therefore, it has been determined that credit for the factor of *Corrective Action* is not warranted, resulting in the base civil penalty of \$50,000 for this Severity Level III violation.

Regarding Violation D.2 in Part I of the Notice, the FSAR and implementing EOPs directed that the swap over of the ECCS pumps' suction from the borated water storage tank (BWST) to the reactor building sump be initiated at the five foot level in the BWST. This BWST level was too low to ensure that the swap over from the BWST to the reactor building sump would occur in time to prevent vortexing in the BWST and to ensure an adequate net positive suction head for the ECCS pumps during post-LOCA operations. This violation is of significant potential safety consequence in that it could have resulted in gas entrainment in the ECCS pumps causing them to be potentially inoperable and unavailable for accident mitigation. In addition, the NRC is concerned that justification for the five foot swap over level was documented in an informal manner through an internal engineering memorandum, rather than through a formal revision to the engineering calculation. Therefore, this violation has been characterized as a Severity Level III violation.

For Violation D.2 in Part I of the Notice, the NRC determined that credit was not warranted for *Identification* because the issue was identified through NRC inspection effort. In addition to the corrective actions previously described, on February 2, 1995, STI 95-011 was issued followed by February 3, 1995, revisions to EOP-07 and 08 to reflect that the swap over should be initiated at 15 feet and completed by 7 feet, BWST level. Given your timely action to evaluate the violation and issue revised procedures to correct the procedural deficiencies, the NRC concluded that credit was warranted for *Corrective Action*, resulting in a base civil penalty of \$50,000 for this violation.

For violation A in Part II of the Notice, the EOPs failed to incorporate the design basis of the ECCS during certain post LOCA conditions requiring both low pressure injection (LPI) and HPI. Specifically, under the conditions in which only one LPI pump was available, the EOPs directed the operators to cross connect the HPI suction header thus, allowing the single LPI pump to be aligned and to provide flow to the reactor vessel as well as to the suction of two HPI pumps. As a result, an inadequate water inventory would be available to provide adequate net positive suction head once the suction source for the LPI was swapped over to the reactor building sump. This procedural error could have resulted in the loss of the only operable LPI pump, thus, the plant operated outside of its design basis. Therefore, in accordance with the Enforcement Policy, this violation is being categorized as a Severity Level III violation. The root cause of this violation was insufficient review by design engineering during the EOP revision process.

In considering the civil penalty to be applied for Violation A in Part II of the Notice, the NRC determined that credit was warranted for *Identification* because you identified the violation as a result of your corrective actions associated with previous MUT issues and appropriately reported it to the NRC. Regarding the factor of *Corrective Action*, at the conference, you advised that you have instituted design and system engineering reviews of operating procedure revisions. In addition, upon identification, immediate actions were taken to implement STI 95-022 and initiate appropriate revisions to the affected EOPs. The final revisions to the EOPs were effective June 9, 1995. Based on these actions, the NRC determined that credit was warranted for *Corrective Action*; therefore, no civil penalty will be assessed for this violation.

E. Other Violations

In addition, Part II of the Notice includes two Severity Level IV violations. The violations involve: (1) the failure to implement timely corrective actions for a previous emergency diesel generator fuel oil tank level deficiency which could have identified earlier the BWST level swap over issue identified in Violation D.2 in Part I of the Notice; and (2) the failure of your fire protection surveillance procedures to verify the minimum required water volume for the fire water storage tanks. Both violations involved untimely corrective actions for Licensee Event Report (LER) No. 92-003.

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Florida Power Corporation
Crystal River Nuclear Plant
Unit 3

Docket No. 50-302
License No. DPR-72
EA 95-126

During NRC inspections conducted during the period September 5, 1994, through December 15, 1995, and Office of Investigations investigations completed on May 24, 1995, and February 13, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

I. Violations Assessed Civil Penalties

- A. Technical Specification 5.6.1.1 requires, in part, that procedures be implemented covering activities as recommended in Regulatory Guide 1.33, Revision 2, Appendix A, of February 1978. Appendix A recommends administrative procedures to cover the authorities and responsibilities for safe operation and shutdown, and operating procedures for the reactor coolant system make-up system. The licensee implemented the above Appendix A recommendations, in part, through Procedure AI-500, "Conduct of Operations," and Procedure OP-402, "Make-up and Purification System."

AI-500, Revisions (Rev.) 80, 81, and 82, Step 4.3.1.1, stated that it is the duty of every member of the Crystal River Plant work force to comply with procedures. In addition, Step 6 of Enclosure 27 stated that it is the responsibility of the Chief Nuclear Operator to ensure that plant evolutions do not violate administrative controls. Procedure OP-402, Rev. 75, Step 4.19.9, required that operators ensure that the make-up tank pressure limits of OP-103B, Curve 8, are not exceeded when adding hydrogen to the make-up tank by manually bypassing the 15 pounds per square inch gauge (psig) hydrogen regulator. Procedure OP-402, Step 4.19.8, required that operators refer to Curve 8 of OP-103B for maximum make-up tank overpressure when adding hydrogen to the make-up tank through the 15 psig hydrogen regulator. Procedure OP-103B, Curve 8, Maximum Make-up Tank Overpressure, Rev. 12, defined the acceptable make-up tank pressure versus level operating region. Procedure AR-403, "PSA-Z Annunciator Response," Annunciator H-04-06, Make-up Tank Pressure High/Low, Rev. 21, required operators to take action to reduce make-up tank pressure to within the limits of OP-103B, Curve 8, when a valid alarm is received.

Contrary to the above, operators failed to meet the requirements of Procedure AI-500 to comply with procedures and administrative controls related to maximum make-up tank pressure on numerous

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occasions during the period June 1, 1994, through September 4, 1994, as evidenced by the following examples:

- (1) The limits of OP-103B, Curve 8 for acceptable make-up tank pressure were exceeded on July 23, 1994, for approximately 122 minutes continuously, from approximately 12:13 to 2:14 p.m.; on July 25, 1994, for approximately 48 minutes continuously, from approximately 10:27 to 11:14 a.m.; on July 27, 1994, for approximately 78 minutes continuously, from approximately 2:44 to 4:01 p.m.; on July 28, 1994, for approximately 184 minutes continuously, from approximately 2:26 to 5:29 p.m.; on July 30, 1994, for approximately 190 minutes continuously, from approximately 9:28 a.m. to 12:38 p.m.; on August 6, 1994, for approximately 141 minutes continuously, from approximately 9:55 a.m. to 12:15 p.m.; on August 8, 1994, for approximately 67 minutes continuously, from approximately 10:08 to 11:14 a.m.; on August 24, 1994, for approximately 87 minutes continuously, from approximately 1:24 to 2:50 p.m.; and, on September 4, 1994, for approximately 86 minutes continuously, from approximately 3:21 to 4:46 p.m.
- (2) Procedure OP-402, Step 4.19.9, was not complied with on July 27, July 28, July 30, August 6, August 8, August 24, and September 4, 1994, in that the make-up tank pressure exceeded the limits of OP-103B, Curve 8, while adding hydrogen to the make-up tank by manually bypassing the 15 psig hydrogen regulator. Also, OP-402, Step 4.19.8, was not complied with on July 23, 1994, in that the make-up tank pressure exceeded the limits of OP-103B, Curve 8, while adding hydrogen to the make-up tank through the 15 psig hydrogen regulator.
- (3) Procedure AR-403, Annunciator H-04-06, was not followed on July 23, July 25, July 27, July 28, July 30, August 6, August 8, August 24, and September 4, 1994, in that timely action was not taken to reduce make-up tank pressure to within the limits of OP-103B, Curve 8, when a valid alarm was received. (01013)

This is a Severity Level III problem (Supplement I)
Civil Penalty - \$100,000

- B. 10 CFR 50.59, "Changes, Tests, and Experiments," in part, allows the licensed facility to conduct tests not described in the safety analysis report, without prior Commission approval, unless the proposed test involves an unreviewed safety question. A proposed test shall be deemed to involve an unreviewed safety question if the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased. The

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Imposition of Civil Penalties

licensee shall maintain records of tests carried out pursuant to this section, including a written safety evaluation which provides the basis for the determination that the test does not involve an unreviewed safety question.

Contrary to the above, on September 4 and 5, 1994, operators conducted tests not described in the safety analysis report, without written safety evaluations to provide a basis for a determination that the tests did not involve an unreviewed safety question. Specifically, operators conducted tests in that they performed evolutions involving make-up tank pressure and level, not required by plant conditions, to collect data. (02013)

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

- C. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," states, in part, that measures shall be established to assure that conditions adverse to quality, such as nonconformances, are promptly identified and corrected. In the case of significant conditions adverse to quality, measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

- (1) Contrary to the above, significant conditions adverse to quality were not promptly identified and corrected, and action was not taken to preclude repetition. Specifically, the licensee failed to perform an adequate review of Problem Report 94-0149, issued on May 10, 1994, that identified licensed operator concerns with the accuracy of OP-103B, Curve 8. The review failed to identify promptly the significant errors that were present in OP-103B, Curve 8 and in the calculations that were the basis for the curve. As a result, plant operations using the curve frequently were outside the design bases of the facility. (03013)

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

- (2) Contrary to the above, significant conditions adverse to quality were not promptly identified and corrected, and action was not taken to preclude repetition. Specifically, Short Term Instruction (STI) 94-019 issued on September 9, 1994, STI-021 issued on September 11, 1994, and Revision 13 to OP-103B, "Plant Operating Curves," issued on January 30, 1995 were corrective actions once problems with the make-up tank overpressure curve were identified but were inadequate to prevent operation outside of the design basis. (04013)

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

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Imposition of Civil Penalties

- D. 10 CFR Part 50, Appendix B, Criterion III, "Design Control," in part, requires that measures be established to assure that applicable regulatory requirements and the design basis, as defined in 10 CFR 50.2, "Definitions," and as specified in the license application, are correctly translated into procedures and instructions.
- (1) Contrary to the above, the design basis was not correctly translated into drawings, procedures, and instructions. Specifically, between approximately April 1993 and September 9, 1994, make-up tank procedure limits for make-up tank pressure failed to meet the emergency core cooling system design basis in that Procedure OP-103B, Curve 8, "Maximum Make-up Tank Overpressure," Rev. 12, did not provide adequate margin to ensure that hydrogen entrainment in the high pressure make-up pumps was prevented when the make-up tank was operated within the specified pressure and level limits. (05013)

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

- (2) Contrary to the above, the design basis was not correctly translated into drawings, procedures, and instructions. Specifically, between initial operation on March 13, 1977, and February 2, 1995, except for the time period of June 1990 through April 1993, the licensee failed to correctly translate the design basis for the emergency core cooling system into the Final Safety Analysis Report. Section 6.1.2.1.2: Procedure EOP-07, "Inadequate Core Cooling;" and Procedure EOP-08, "LOCA Cooledown." The Final Safety Analysis Report, Section 6.1.2.1.2: EOP-07; and EOP-08 failed to meet the design basis in that the manual swap over from the borated water storage tank to the reactor building sump was directed to be initiated at a level of five feet or less in the borated water storage tank, which was insufficient to assure that all of the emergency core cooling system pumps would not be damaged by air entrainment from vortexing in the borated water storage tank. Additionally, the licensee had no official design calculation to support the swap over level of five feet that was incorporated into emergency operating procedures in April 1993. The official calculation, 190-0024, supported a swap over level equivalent to approximately 14 feet in the borated water storage tank. An internal engineering memorandum was inappropriately used to support the swap over level of five feet. (06013)

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

II. Violations Not Assessed a Civil Penalty

- A. 10 CFR Part 50, Appendix B, Criterion III, "Design Control," in part, requires that measures be established to assure that applicable regulatory requirements and the design basis, as defined in 10 CFR 50.2, "Definitions," and as specified in the license application, are correctly translated into procedures and instructions.

Contrary to the above, the design basis was not correctly translated into drawings, procedures, and instructions. Specifically, between April 8, 1993, and March 22, 1995, Procedures EOP-07 and EOP-08 failed to meet the emergency core cooling system design basis. Specifically, during post loss-of-coolant accident operation with one low pressure injection pump and two high pressure injection pumps operating, and with the high pressure injection pump suction crosstie valve open, as directed by Procedures EOP-07 and EOP-08, the licensee's engineering calculation M90-0021, Rev. 5, dated March 22, 1995, indicated that the water inventory in the reactor building sump would not have provided adequate net positive suction head to the one low pressure injection pump. This lineup could result in the loss of the only operable low pressure injection pump. (07013)

This is a Severity Level III violation (Supplement I)

- B. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," states, in part, that measures shall be established to assure that conditions adverse to quality, such as nonconformances, are promptly identified and corrected. In the case of significant conditions adverse to quality, measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

Contrary to the above, conditions adverse to quality were not promptly identified and corrected, and action was not taken to preclude repetition. Specifically, the licensee failed to identify the root cause and take steps to preclude repetition of a significant condition adverse to quality related to the emergency diesel generator fuel oil tank levels initially identified in License Event Report No. 92-003, dated May 15, 1992. As of March 27, 1996, corrective actions to determine the relationship of suction point to tank level for other tanks having a Technical Specification required minimum volume including the borated water storage tank had not been implemented. A timely review of the calculation of the borated water storage tank volume could have resulted in earlier identification and correction of the inadequacy with the borated water storage tank level for manual

swap over of emergency core cooling system pumps' suction from the borated water storage tank to the reactor building sump. (08014)

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

- C. Crystal River Facility Operating License No. DPR-72. Paragraph 2.C.(9), Fire Protection, required that the licensee implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility.

Final Safety Analysis Report. Section 9.8 stated that the fire protection program has been formulated in accordance with specific fire protection governing documents listed in Final Safety Analysis Report Table 9-18. Table 9-18 included the Fire Protection Plan.

The Fire Protection Plan. Table 6.1.a. Rev. 11. Water Supply Operability Requirements. Compensatory Measures and Reports, required that at all times there be two separate water supplies, each with a minimum water volume of 345,000 gallons. Table 6.1.b. Water Supply Surveillance Requirements, stated: verify minimum required water volume of 345,000 gallons in each fire water tank, which is implemented by Procedure SP-300, "Control Room Log Readings." Rev. 131.

The Fire Protection Plan. Section 7.8 stated, in part, that in the case of significant conditions adverse to fire protection, the cause of the condition is determined, analyzed, and prompt corrective actions are taken to preclude recurrence.

Technical Specification 5.6.1.1.C required that written procedures shall be established, implemented, and maintained covering the Fire Protection Program.

Contrary to the above, the licensee failed to establish an adequate procedure to verify the minimum required water volume of 345,000 gallons in each of two fire water storage tanks. Specifically, Procedure SP-300 required that the water level in the tank be verified to be 35 feet, which, under worst case conditions verified a volume of water less than required by the Fire Protection Plan as well as the Enhanced Design Basis Document. In addition, prompt corrective actions for Licensee Event Report No. 92-003, dated August 1, 1991, would have revealed this condition adverse to fire protection. (09014)

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

Pursuant to the provisions of 10 CFR 2.201, Florida Power Corporation (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission.

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Imposition of Civil Penalties

within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalties (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalties proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalties in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties.

In requesting mitigation of the proposed penalties, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalties.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory

Notice of Violation and Proposed   - 8 -
Imposition of Civil Penalties

Commission. One white Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II and to the Resident Inspector, Crystal River Nuclear Plant.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Atlanta, Georgia
this 10th day of July 1996

Predecisional Enforcement Conference Attendees
March 28, 1996

Licensee

D. Fields, former Shift Supervisor, Crystal River Unit 3
R. Weiss, Former Assistant Shift Supervisor, Crystal River Unit 3
R. Hendrix, Esquire
D. Dickey, Esquire
B. Weiss, Observer

Nuclear Regulatory Commission

L. Reyes, Deputy Regional Administrator, Region II (RII)
A. Gibson, Director, Division of Reactor Safety (DRS), RII
J. Lieberman, Director, Office of Enforcement
S. Richards, Chief, Operator Licensing Branch, Office of Nuclear Reactor
Regulation (NRR)
B. Uryc, Director, Enforcement and Investigations Coordination Staff (EICS)
C. Evans, Regional Counsel
L. Clark, Counsel, Office of the General Counsel
K. Landis, Chief, Reactor Projects Branch 3, Division of Reactor Projects
C. Rapp, Reactor Inspector

Enclosure 2

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

October 17, 1995

EA 95-077

Houston Lighting & Power Company
ATTN: William T. Cottle, Group
Vice President, Nuclear
Post Office Box 289
Wadsworth, Texas 77483

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES -
\$160,000
(NRC Office of Inspector General Investigation 92-491)

Dear Mr. Cottle:

This letter refers to an NRC Office of Inspector General (OIG) investigation conducted at the Houston Lighting & Power (HL&P) Company's South Texas Project (STP) facility and to a recently-issued Department of Labor (DOL) Administrative Law Judge's (ALJ) Recommended Decision and Order (RDO) on the same issue (93-ERA-7, 93-ERA-8, April 6, 1995). The purpose of this investigation was to review details concerning the alleged discrimination, in violation of the requirements of 10 CFR 50.7, by HL&P against two former members of the licensee's nuclear security department (NSD), Messrs. David Lamb and James Dean. As indicated in the enclosed Notice of Violation (Notice), the NRC has concluded, on the basis of the OIG investigation, the DOL RDO, and a review of other available information, that HL&P discriminated against these individuals by terminating their employment at STP as a result of their engaging in protected activities.

Based on the findings of the OIG investigation, as documented in its report which was issued February 18, 1993, Demands for Information (DFIs) were issued on September 29, 1993, to both HL&P and Mr. Richard Balcom, the former manager of the NSD. Following HL&P's and Mr. Balcom's responses to the DFIs on November 15, 1993, the NRC informed both parties on December 30, 1993 that, because the issue of discrimination was then currently before a DOL ALJ, the staff would await the decision of the ALJ before determining if further enforcement action was warranted.

On April 6, 1995, the ALJ issued his RDO which found that the former NSD employees had been discriminated against by HL&P in that their employment was terminated on May 4, 1992, in retaliation for having earlier identified and reported safety concerns to the NRC. Following the issuance of the ALJ's RDO, a predecisional enforcement conference was conducted with HL&P and Mr. Balcom on June 16, 1995. This conference was transcribed and open to public observation. The purpose of the conference was to give HL&P and Mr. Balcom the opportunity to present their positions regarding their action connected with the alleged discrimination of the two former NSD employees and to discuss any corrective action taken as a result of the ALJ's findings.

Based on its review of the OIG's report, the DFI responses, the ALJ's RDO, and the information that was obtained during the predecisional enforcement conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties.

The NRC recognizes that these violations occurred early in 1992, and that, since their occurrence, HL&P has implemented many improvements both in its program for addressing employee concerns without the employee's fearing retaliation, and in its program for identifying and correcting problems. In addition, NRC recognizes that HL&P has instituted many significant management changes within its organization that appear to have improved its overall performance and increased the desire of management to identify and correct problems. Notwithstanding these actions, the NRC has decided that enforcement action is warranted to reinforce the message to HL&P's present organization that discrimination against any individual who raises safety or regulatory concerns is unacceptable and will not be tolerated by the NRC. Therefore, each of the violations has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action," (Enforcement Policy) (60 FR 34381, June 30, 1995) at Severity Level II.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$80,000 normally is considered for a Severity Level II violation. In this case, in order to emphasize the importance of ensuring that appropriate controls exist to preclude discrimination against individuals for identifying safety concerns, I considered exercising enforcement discretion, in accordance with Section VII of the Enforcement Policy, to increase the base civil penalty to the statutory maximum civil penalty amount of \$100,000 for each of the two violations. However, after considering the efforts that HL&P has undertaken to improve its programs to identify and correct employee identified plant problems without fear of licensee management reprisals as described above, and after consultation with the Commission, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$160,000, \$80,000 for each of the two violations described in the Notice.

HL&P is required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing its response. Since the NRC enforcement action in this case is being proposed prior to a final decision on this matter by the Secretary of Labor (SOL), you may delay payment of, or response to, the proposed civil penalties and submission of certain portions of the response as described in the enclosed Notice until 30 days after the SOL's decision, at which time you may also supplement your earlier responses. In the response required by this letter and Notice, you should document the specific actions taken and any additional actions you plan to prevent recurrence of violations of this type and any actions that you have taken or planned to minimize any chilling effect that might arise from this incident.

Also enclosed with this letter is a copy of a letter and Notice of Violation to Mr. Balcom.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and HL&P's response will be placed in the NRC Public Document Room (PDR). To the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information that is not already in the public record, HL&P should clearly indicate the specific information that it desires not to be placed in the PDR, and provide the legal basis to support HL&P's request for withholding the information from the public.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96.511.

Sincerely,

L. J. Callan
Regional Administrator

Docket Nos. 50-498 and 50-499
License Nos. NPF-76 and NPF-80

Enclosures: Notice of Violation and
Proposed Imposition of Civil Penalties;
Letter and Notice of Violation
to Mr. Balcom

cc w/encl:

Houston Lighting & Power Company
ATTN: Lawrence E. Martin, General Manager
Nuclear Assurance & Licensing
P.O. Box 289
Wadsworth, Texas 77483

City of Austin
Electric Utility Department
ATTN: J. C. Lanier/M. B. Lee
721 Barton Springs Road
Austin, Texas 78704

City Public Service Board
ATTN: K. J. Fiedler/M. T. Hardt
P.O. Box 1771
San Antonio, Texas 78296

cc w/encl: See Next Page

Houston Lighting &
Power Company

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cc w/encl: (Con't)
Morgan, Lewis & Bockius
ATTN: Jack R. Newman, Esq.
1800 M. Street, N.W.
Washington, D.C. 20036-5869

Central Power and Light Company
ATTN: Mr. C. A. Johnson
P.O. Box 289
Mail Code: N5012
Wadsworth, Texas 77483

INPO
Records Center
700 Galleria Parkway
Atlanta, Georgia 30339-5957

Mr. Joseph M. Hendrie
50 Bellport Lane
Bellport, New York 11713

Bureau of Radiation Control
State of Texas
1100 West 49th Street
Austin, Texas 78756

Office of the Governor
ATTN: Andy Barrett, Director
Environmental Policy
P.O. Box 12428
Austin, Texas 78711

Judge, Matagorda County
Matagorda County Courthouse
1700 Seventh Street
Bay City, Texas 77414

Licensing Representative
Houston Lighting & Power Company
Suite 610
Three Metro Center
Bethesda, Maryland 20814

Houston Lighting & Power Company
ATTN: Rufus S. Scott, Associate
General Counsel
P.O. Box 61867
Houston, Texas 77208

cc w/encl: See Next Page

Houston Lighting &
Power Company

5

cc w/encl: (Con't)
Egan & Associates, P.C.
ATTN: Joseph R. Egan, Esq.
2300 N Street, N.W.
Washington, D.C. 20037

Little Harbor Consultants, Inc.
ATTN: Mr. J. W. Beck
44 Nichols Road
Cohasset, MA 02025-1166

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Houston Lighting & Power Company
South Texas Project Electric
Electric Generating Station

Docket Nos. 50-498; 50-499
License Nos. NPF-76; NPF-80
EA 95-077

Based on an NRC investigation conducted May 1992 to February 1993 and a Department of Labor Administrative Law Judge Recommended Decision and Order in DOL Case Nos. 93-ERA-7 and 93-ERA-8 issued on April 6, 1995, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action," (Enforcement Policy) (60 FR 34381, June 30, 1995), the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

- I. 10 CFR 50.7, Employee Protection, prohibits discrimination by a Commission licensee against any employee for engaging in certain protected activities. Discrimination includes discharge and other actions that relate to compensation, terms, conditions, and privileges of employment. Protected activities are described in Section 210 (now 211) of the Energy Reorganization Act of 1974, as amended, and in general are related to the administration or enforcement of a requirement imposed under the Atomic Energy Act or Energy Reorganization Act.

Contrary to the above, David Lamb, a supervisor in the licensee's Nuclear Security Department, was unlawfully discriminated against in that on May 4, 1992, he was terminated from his position for engaging in protected activities. The protected activities included identifying safety concerns to the NRC.

This is a Severity Level II violation (Supplement VII). (01012)
Civil Penalty - \$80,000

- II. 10 CFR 50.7, Employee Protection, prohibits discrimination by a Commission licensee against any employee for engaging in certain protected activities. Discrimination includes discharge and other actions that relate to compensation, terms, conditions, and privileges of employment. Protected activities are described in Section 210 (now 211) of the Energy Reorganization Act of 1974, as amended, and in general are related to the administration or enforcement of a requirement imposed under the Atomic Energy Act or Energy Reorganization Act.

Contrary to the above, James Dean, an employee in the licensee's Nuclear Security Department, was unlawfully discriminated against in that on

May 4, 1992, he was terminated from his position for engaging in protected activities. The protected activities included identifying safety concerns to the NRC.

This is a Severity Level II violation (Supplement VII). (02012)
Civil Penalty - \$80,000

Pursuant to the provisions of 10 CFR 2.201, Houston Lighting & Power Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalties (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (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. At your election, responses to items (1) and (2) may be deferred until 30 days after the decision of the Secretary of Labor. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within 30 days of the final decision of the Secretary of the Department of Labor in this case, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation(s) listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the 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 factors addressed in Section VI.B.2 of "General Statement of Policy and Procedure for NRC Enforcement Action." (Enforcement Policy) (60 FR 34381, June 30, 1995), should be addressed. Any written answer in accordance with 10 CFR 2.205 should be

set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas, 76011 and a copy to the NRC Resident Inspector at the STP facility.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information that is not already in the public record is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Arlington, Texas,
this 17th day of October 1995

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

September 19, 1996

EA 96-133
EA 96-136

William T. Cottle, Group Vice
President, Nuclear
Houston Lighting & Power Company
Post Office Box 289
Wadsworth, Texas 77483

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES -
\$200,000 (DOL CASE NOS. 93-ERA-016 & 95-ERA-004)

Dear Mr. Cottle:

This refers to the matters discussed at the predecisional enforcement conference conducted on July 19, 1996 in the NRC's Arlington, Texas office. As discussed in the NRC's June 19, 1996 letter to you, the conference was conducted to discuss two apparent violations of 10 CFR 50.7, Employee Protection, involving discrimination against employees who had engaged in protected activities. Each apparent violation involved Houston Lighting & Power Company (HL&P) contractors -- Ebasco Services, Inc. (Ebasco) or Raytheon Engineers and Constructors, Inc. (Raytheon) -- discriminating against employees at HL&P's South Texas Project Electric Generating Station (STP). A letter documenting the conference, including the outline from HL&P and Raytheon's conference presentation, was sent to you and placed in the NRC Public Document Room (PDR) on July 31, 1996. The transcript of the conference also has been placed in the PDR.

Both apparent violations were investigated by the Department of Labor (DOL) and NRC's findings are based on the DOL determinations with respect to the two complaints. As indicated in our June 19 letter, the NRC normally relies on DOL determinations in deciding whether violations of NRC employee protection requirements occurred. The NRC recognizes that HL&P was not a party to either proceeding before the DOL; however, this does not relieve HL&P of its responsibility for the actions of its contractors. Thus, based on the decisions by DOL in these cases, and in the absence of compelling evidence to the contrary, the NRC has determined that violations of 10 CFR 50.7 occurred.

These violations are described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties. A Notice of Violation is being issued to Raytheon for the second violation described below, but not for the first violation since Raytheon was not a respondent in that DOL case. That Notice of Violation is being distributed to the same distribution list, so you will receive a copy.

The first violation (EA 96-133) is based on findings from a DOL proceeding (93-ERA-016) in which the Secretary of Labor (SOL), in a decision issued March 13, 1996, found that Thomas H. Smith was the subject of employment

discrimination in 1991 when he was subjected to a hostile work environment in retaliation for raising concerns about scaffolding practices. The retaliatory treatment in Mr. Smith's case consisted of offensive cartoons depicting Mr. Smith as a whistleblower. The Secretary's decision reversed a February 17, 1994 decision issued by the Administrative Law Judge (ALJ), who concluded that the actions taken were of an abusive and harassing nature, but did not constitute discrimination. At the time of the discriminatory treatment, Mr. Smith was an employee of Ebasco Services, Inc. (Ebasco), whose contract with HL&P was purchased by Raytheon Engineers and Constructors, Inc. (Raytheon) in December 1993.

The second violation (EA 96-136) is based on a DOL proceeding (95-ERA-004) in which the presiding ALJ, in a Recommended Decision and Order issued September 29, 1995, found that Earl V. Keene was subjected to discriminatory treatment in 1994 after he raised concerns about signing off for electrical maintenance work he did not perform. The discriminatory treatment in Mr. Keene's case consisted of his inclusion in a March 24, 1994 reduction in force, his receiving a lower performance appraisal rating, and his having been subjected to fitness-for-duty testing on May 24, 1994 when he returned to the STP facility with another individual who was completing documentation related to pending employment. At the time of the discriminatory treatment, Mr. Keene was an employee of Raytheon. Raytheon personnel at the conference noted their disagreement with the ALJ's findings and indicated a brief has been filed with the SOL describing their bases for their disagreement. The DOL's Administrative Review Board, which has been delegated the authority to decide these cases for the Secretary of Labor, has not issued a final decision in this case.

In addition to the potential for violations of this type to have an effect on safety, each of these violations raises significant regulatory concerns. In the case involving Mr. Smith, the SOL found that Mr. Smith had been subjected to a hostile work environment. In this case, Ebasco managers appear to have been aware of the harassment of Mr. Smith and allowed it to continue for approximately two and a half months. Thus, this violation has been classified at Severity Level II in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600. In the case involving Mr. Keene, it is significant that the discriminatory treatment of Mr. Keene occurred in 1994, after HL&P had initiated efforts to address the environment at STP for raising concerns, including actions that were specifically addressed to contractors and their supervisors. This violation, which involved discrimination by first line supervisors, is of significant regulatory concern and is classified at Severity Level III in accordance with the Enforcement Policy.

Despite these violations having occurred some time ago, they are important because, absent prompt and decisive corrective action, such violations--and claims of discrimination that remain unresolved-- can affect perceptions and have a chilling effect on the willingness of other employees to raise concerns to their employer or to the NRC. At the July 19 conference, HL&P and Raytheon

discussed at length the broad and comprehensive actions taken, both prior to and after the DOL decisions in the specific cases, to foster an environment at STP in which employees would feel free to raise concerns without fear of retaliation. Raytheon's corporate actions include the development of a hotline for reporting concerns and an employee concerns program procedure, issued March 20, 1996. Raytheon's actions at STP include posting copies of relevant requirements and the DOL's decision in the Smith case, and additional training for managers and supervisors. HL&P has taken numerous actions since 1993 to enhance the environment for raising concerns at STP, to assure that employees are aware of the various means for raising concerns, and to improve the STP employee concerns program. These actions include implementing a new employee concerns program, hiring a new manager for this program and having the manager of this program report directly to the group vice president, conducting periodic assessments of the environment and actions to make the employee concerns program more accessible and responsive to employee concerns. In response to the specific cases at issue, HL&P investigated the concerns raised by the employees, re-evaluated its past actions and has made presentations to Raytheon personnel on the STP employee concerns program. Many of the actions taken by HL&P began in 1993 in response to other discrimination issues that were pending at the time. One of these earlier issues resulted in the NRC proposing a \$160,000 civil penalty on September 5, 1995, based on the NRC's determination that David Lamb and James Dean were laid off in 1992 in retaliation for their raising concerns about STP security issues¹ (EA 95-077).

The NRC acknowledges the comprehensive nature of the actions taken by HL&P and Raytheon to address the environment for raising concerns at STP. However, despite HL&P and Raytheon taking comprehensive actions with regard to the overall site environment, actions in response to these specific instances of discrimination were not taken until adjudicatory findings were made against Ebasco and, as of the date of the adjudication, no corrective actions were described that would foster a sense of individual accountability for this objectionable behavior. For example, when asked at the conference whether the supervisors who were involved in these matters were counseled, the answer from Raytheon was that there had been no action to conduct individual counseling. Clearly some action should have been taken to assure that the individuals involved in these matters understand the protections afforded employees by law, the significance of violating such protections, and the possible consequences of doing so. Although the NRC understands that following the conference, steps were taken to ensure that the Raytheon supervisors involved in the discriminatory acts had been counseled, this fundamental corrective action should have been taken much earlier. This delay in counseling the supervisors gains additional regulatory significance because the delay may have created, or perpetuated, the perception among other employees that you were not serious about preventing these types of violations.

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¹ HL&P was permitted to defer payment of that penalty pending a final decision of the Secretary of Labor.

from occurring and may have detracted from your otherwise comprehensive actions to address these matters.

In accordance with the Enforcement Policy, a civil penalty is considered for violations at or above Severity Level III. Because the NRC considers these violations willful, in that there was a deliberate intent to discriminate, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. No credit is due for identification because these violations were identified as a result of the DOL's adjudicatory process. With respect to corrective action, the NRC finds your corrective actions with respect to the overall site environment satisfactory, but, for reasons discussed above, finds your corrective actions lacking with respect to these specific cases.

In the case involving Mr. Smith, the base value of a Severity Level II violation is \$80,000. An adjusted penalty of \$160,000 could result from applying the civil penalty assessment process, as described above, where no credit is given for identification or corrective action.² In the case involving Mr. Keene, the base value of a Severity Level III violation is \$50,000. As in the case involving Mr. Smith, giving no credit for identification or corrective action, an adjusted penalty of \$100,000 could result from applying the civil penalty assessment process for this violation, resulting in total civil penalties of \$260,000 for these combined violations. However, after balancing your failure to promptly counsel the individuals who caused the violations with your extensive actions taken to address the overall environment for raising concerns at your facility, the NRC has decided to assess total civil penalties of \$200,000, in accordance with the discretion permitted in VII.B.6 of the Enforcement Policy. As indicated in the enclosed Notice, the civil penalties will be assessed at \$100,000 each for EA 96-133, for the case involving Mr. Smith; and EA 96-136, for the case involving Mr. Keene.

Therefore, to emphasize the importance of protecting individuals against discrimination and taking comprehensive corrective action that includes establishing accountability for violations of this requirement, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice) in the amount of \$200,000.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. As stated in a

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² Although the NRC is limited by statute to \$100,000 per violation per day, a violation of 10 CFR 50.7 involving a hostile work environment is viewed as a continuing violation that may result in higher civil penalties being assessed.

footnote to the Notice, HL&P may defer its response to the civil penalty assessed for Violation 2 in the Notice until 30 days following the DOL Administrative Review Board decision in 95-ERA-004. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

L. J. Callan
Regional Administrator

Docket Nos. 50-498; 50-499
License Nos. NPF-76; NPF-80

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalties

cc w/Enclosure: (See Next Page)

cc w/Enclosure:
Lawrence E. Martin, General Manager
Nuclear Assurance & Licensing
Houston Lighting & Power Company
P.O. Box 289
Wadsworth, Texas 77483

Mr. J. C. Lanier/Mr. M. B. Lee
City of Austin
Electric Utility Department
721 Barton Springs Road
Austin, Texas 78704

Mr. K. J. Fiedler/Mr. M. T. Hardt
City Public Service Board
P.O. Box 1771
San Antonio, Texas 78296

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Morgan, Lewis & Bockius
1800 M. Street, N.W.
Washington, D.C. 20036-5869

Mr. G. E. Vaughn/Mr. C. A. Johnson
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P.O. Box 289
Mail Code: N5012
Wadsworth, Texas 77483

INPO - Records Center
700 Galleria Parkway
Atlanta, Georgia 30339-5957

Mr. Joseph M. Hendrie
50 Bellport Lane
Bellport, New York 11713

Bureau of Radiation Control
State of Texas
1100 West 49th Street
Austin, Texas 78756

John L. Howard, Director
Environmental Policy
Office of the Governor
P.O. Box 12428
Austin, Texas 78711

cc w/Enclosure: (See Next Page)

cc w/Enclosure: (Con't)
Judge, Matagorda County
Matagorda County Courthouse
1700 Seventh Street
Bay City, Texas 77414

Licensing Representative
Houston Lighting & Power Company
Suite 610
Three Metro Center
Bethesda, Maryland 20814

Rufus S. Scott, Associate
General Counsel
Houston Lighting & Power Company
P.O. Box 61867
Houston, Texas 77208

Joseph R. Egan, Esq.
Egan & Associates, P.C.
2300 N Street, N.W.
Washington, D.C. 20037

Mr. J. W. Beck
Little Harbor Consultants, Inc
44 Nichols Road
Cohasset, MA 02025-1166

David R. Hyster
Vice President, Nuclear Services
Raytheon Engineers and Constructors
P.O. Box 8223
30 South 17th St.
Philadelphia, PA 1910-8223

James Remeika
Assistant Human Resources Counsel
Raytheon Company
141 Spring Street
Lexington, Massachusetts 02173-7899

Thomas H. Smith
1804 Lloyd
Bay City, Texas 77414

cc w/Enclosure: (See Next Page)

cc w/Enclosure: (Con't)
Earl V. Keene
909 Virnham Woods Blvd.
#1
Pasadena, Texas 77503

Timothy Sloan, Esq.
P.O. Box 2171
Bay City, Texas 77404-2172

Ms. Billie Garde, Esq.
Hardy & Johns
2 Houston Center, Suite 500
Houston, Texas 77010

Edward A. Slavin, Jr., Esq.
35 S.E. 8th Terrace
Deerfield Beach, Florida 33441-4340

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Houston Lighting & Power Company
South Texas Project Electric
Generating Station

Docket No. 50-498; 50-499
License No. NPF-76; NPF-80
EA 96-133; EA 96-136

Based on the NRC's review of a March 13, 1996 Secretary of Labor's Decision and Order of Remand in the case of Thomas H. Smith (93-ERA-016) and a September 29, 1995 DOL Administrative Law Judge's Recommended Decision and Order in the case of Earl V. Keene (95-ERA-004), violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

10 CFR 50.7 states, in part, that discrimination by a Commission licensee or a contractor of a Commission licensee against an employee for engaging in certain protected activities is prohibited. The activities which are protected are defined in Section 211 of the Energy Reorganization Act, as amended, and include, but are not limited to, reporting of safety concerns by an employee to his employer or the NRC.

1. Contrary to the above, the Secretary of Labor found in a decision issued March 13, 1996, that Thomas H. Smith was the subject of employment discrimination from October to December 1991, when he was subjected to a hostile work environment in retaliation for raising concerns about scaffolding practices, a protected activity. At the time of the discriminatory action, Mr. Smith was an employee of Ebasco Services, Inc., a contractor of the licensee. (01012)

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

2. Contrary to the above, a Department of Labor Administrative Law Judge found in a recommended decision and order issued September 29, 1995, that Earl V. Keene was the subject of employment discrimination in 1994 for raising concerns about signing off on electrical maintenance work he did not perform, a protected activity. The discriminatory treatment included being selected for a March 24, 1994 reduction in force, receiving a lower performance appraisal rating, and being subjected to fitness-for-duty testing on May 24, 1994. At the time of the discriminatory actions, Mr. Keene was an employee of Raytheon Engineers and Constructors, Inc., a contractor of the licensee. (02013)

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

Pursuant to the provisions of 10 CFR 2.201, Houston Lighting & Power Company (HL&P or Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalties (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalties in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission.³ Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties.

In requesting mitigation of the proposed penalties, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalties.

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³ With respect to the response required and civil penalty assessed for Violation 2 above, HL&P may defer this until 30 days following the DOL's Administrative Review Board decision in 95-ERA-004.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Arlington, Texas,
this 19th day of September 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

July 24, 1996

EA 96-116

Mr. B. Ralph Sylvia
Executive Vice President
Generation Business Group
Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
Post Office Box 63
Lycoming, New York 13093

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$80,000 (Administrative Law Judge's Recommended Decision and
Order - 95-ERA-005)

Dear Mr. Sylvia:

This letter refers to the U.S. Department of Labor (DOL) Administrative Law Judge's (ALJ) Recommended Decision and Order, dated March 15, 1996 (95-ERA-005), which found that a former employee of Nine Mile Point (NMP) was discriminated against by Niagara Mohawk Power Corporation (NMPC) for raising safety concerns at the NMP facility. Based on the ALJ's Recommended Decision, a violation of the Commission's regulations set forth in 10 CFR 50.7, "Employee protection," has occurred. Under 10 CFR 50.7, discrimination by a Commission licensee against an employee or contractor employee for engaging in protected activities is prohibited.

On May 10, 1996, a transcribed predecisional enforcement conference was held with you and members of your staff, to discuss this matter, the apparent violation, its cause and your corrective actions. In accordance with current policy, the NRC intends to base its enforcement action on the ALJ's decision, concluding that a violation of NRC requirements occurred in this case. We note that at the enforcement conference you denied that you discriminated against the individual, and have indicated that you intend to appeal the ALJ's decision if it is affirmed by the Secretary of Labor. The violation of 10 CFR 50.7 is described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty. The circumstances surrounding the violation are described in detail in the ALJ's Recommended Decision and Order. Specifically, according to the ALJ decision, the employee had raised concerns regarding compliance with the licensing basis in that the emergency method analyzed in the licensing basis was not employed in any operating or emergency operating procedure for the residual heat removal (RHR) system. Subsequently, the engineer's employment with NMP was terminated.

Discrimination includes discharge and other actions that relate to compensation, terms, conditions, or privileges of employment. Protected activities are described in Section 211 of the Energy Reorganization Act of 1974, as amended, and, in general, are related to the administration or enforcement of a requirement imposed under the Atomic Energy Act or the Energy

Reorganization Act. Protected activities include, but are not limited to, an employee providing the Commission or his or her employer information about alleged violations of either the Atomic Energy Act or the Energy Reorganization Act. Since discriminatory actions in this case involved the then-Manager of Engineering for Unit 2, this violation has been categorized at Severity Level II in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600. Such violations are significant, because they could have a chilling effect on other licensee or contractor personnel and deter them from identifying and/or raising safety concerns.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$80,000 is considered for a Severity Level II violation. The NRC considered whether credit was warranted for Identification and for Corrective Action in accordance with the civil penalty process in Section VI.B.2 of the Enforcement Policy. Because the violation in this case was identified by the DOL, credit is not warranted for the identification. Credit is warranted for your corrective actions, because your actions were considered both prompt and comprehensive. These actions, which were discussed during your presentation at the conference, include but are not limited to the following: (1) reemphasizing to management the rights and responsibilities of employees to raise safety issues; (2) reinforcing, at all levels of management, the value of reporting issues to improve performance; (3) reemphasizing the availability of the Quality First Program, and (4) offering comparable reemployment to the individual on May 3, 1996.

Therefore, to emphasize the importance of continuously assuring a work environment that is free of any harassment, intimidation, or discrimination against those who raise safety concerns, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) in the amount of \$80,000 for this Severity Level II violation in accordance with the civil penalty assessment process set forth in the Enforcement Policy.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. Since the NRC enforcement action in this case is being proposed prior to a final Secretary of Labor (SOL) decision on this matter, you may delay payment of the proposed civil penalty, as well as certain portions of the response, as described in the enclosed Notice, until 30 days after the SOL decision, at which time you also may supplement your earlier responses. In the response required by this letter and Notice, you should document the specific actions taken and any additional actions you plan to prevent recurrence of violations of this type, and any actions that you have taken or planned to minimize any chilling effect arising from this incident that might inhibit or prevent your employees from raising safety concerns either to your own organization or to the NRC. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

Niagara Mohawk Power
Corporation

- 3 -

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96.511.

Sincerely,

Thomas T. Martin
Regional Administrator

Docket No. 50-410
License No. NPF-69

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/enclosure:

R. Abbott, Vice President & General Manager - Nuclear
C. Terry, Vice President-Nuclear Engineering
M. McCormick, Vice President - Safety Assessment and Support
N. Rademacher, Unit 1 Plant Manager
J. Conway, Unit 2 Plant Manager
D. Wolniak, Manager, Licensing
J. Warden, New York Consumer Protection Branch
G. Wilson, Senior Attorney
M. Wetterhahn, Winston and Strawn
Director, Electric Division, Department of Public Service, State of New York
C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law
J. Vinquist, MATS, Inc.
P. Eddy, Power Division, Department of Public Service, State of New York
State of New York SLO Designee

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
Unit 2

Docket No. 50-410
License No. NPF-69
EA 96-116

Based on the Recommended Decision and Order by a U.S. Department of Labor (DOL) Administrative Law Judge, dated March 15, 1996 (DOL case 95-ERA-005), a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violation and associated civil penalty are set forth below:

10 CFR 50.7(a), in part, prohibits discrimination by a Commission licensee against an employee for engaging in certain protected activities. Discrimination includes discharge and other actions that relate to the compensation, terms, conditions, or privileges of employment. Protected activities are described in Section 211 of the Energy Reorganization Act of 1974, as amended, and in general are related to the administration or enforcement of a requirement imposed under the Atomic Energy Act or the Energy Reorganization Act, and include, but are not limited to, an employee providing the Commission or his or her employer information about alleged violations of either the Atomic Energy Act or the Energy Reorganization Act.

Contrary to the above, as determined in the DOL Administrative Law Judge's Recommended Decision and Order in case 95-ERA-005, dated March 15, 1996, Niagara Mohawk Power Corporation (NMPC) discriminated against Mr. Robert Norway, a nuclear engineer, for engaging in protected activities. Specifically, NMPC terminated Mr. Norway's employment in February 1994 for raising safety concerns to his employer beginning in 1991. (01012)

This is a Severity Level II violation (Supplement VII).
Civil Penalty - \$80,000

Pursuant to the provisions of 10 CFR 2.201, NMPC (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted and, if denied, the reasons why, (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. At your election, responses to items (1) and (2) may be deferred until 30 days after the decision of the Secretary of Labor. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response.

If an adequate reply is not received within the time specified in this Notice, an Order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within 30 days of the final decision of the Secretary of Labor in this case, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: Mr. James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at King of Prussia, Pennsylvania
this 24th day of July 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

June 4, 1996

EA 96-059

Mr. Ted C. Feigenbaum
Executive Vice President - Nuclear
Northeast Nuclear Energy Company
c/o Mr. Terry L. Harpster
Post Office Box 128
Waterford, Connecticut 06385

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL
PENALTY - \$100,000
(Administrative Law Judge's Recommended Decision and Order -
95-ERA-18 and 95-ERA-47)

Dear Mr. Feigenbaum:

This letter refers to the Department of Labor (DOL) Administrative Law Judge's (ALJ) Recommended Decision and Order, dated December 12, 1995, which found that a former employee of Bartlett Nuclear, Inc. (Bartlett), a contractor at your Millstone facility, was discriminated against by Northeast Nuclear Energy Company (NNECO) and Bartlett for raising safety concerns at the facility. Based on the NRC review of the ALJ Recommended Decision, the NRC finds that a violation of the Commission's regulations set forth in 10 CFR 50.7, "Employee Protection," has occurred. Under 10 CFR 50.7, discrimination by a Commission licensee against an employee or contractor employee for engaging in protected activities is prohibited. Although both you and Bartlett were offered the opportunity for an enforcement conference, you both declined such a conference, and instead, submitted written responses to the apparent violations.

Although you denied, in your March 20, 1996 letter, that you discriminated against the individual and have filed a motion for reconsideration of the DOL ALJ Decision and Order, the NRC adopts the findings of the DOL ALJ and concludes that a violation of NRC requirements occurred in cases 95-ERA-18 and 47. The violation is described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice).

Protected activities include providing the Commission information about possible violations of requirements imposed under either the Atomic Energy Act or the Energy Reorganization Act, requesting the Commission to institute enforcement action against his or her employer for the administration or enforcement of these requirements, or testifying in any Commission proceeding. The actions taken against the former contractor employee (who was a Senior Health Physics Technician) after he raised concerns to line management and the NRC, constitute a violation of 10 CFR 50.7. The violation is categorized at Severity Level III

in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), (60 FR 34381, June 30, 1995). Such violations are significant because they could have a chilling effect on other licensee or contractor personnel and deter them from identifying and/or raising safety concerns. The violation takes on even more significance because the NRC has issued two civil penalties to you since May 1993 for violations involving discrimination against employees who raised safety concerns.

Under the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Millstone Nuclear Station has been the subject of several escalated enforcement actions within the last two years involving all three units (for example, a Severity Level III violation with a \$50,000 civil penalty was issued on May 25, 1995, for a violation involving the failure to identify and correct a potential degradation of certain motor-operated-valves at Unit 2). Therefore, the NRC considered whether credit was warranted for identification and corrective action in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy.

Credit was not given for *Identification* because you did not identify the violation. Credit was considered for *Corrective Action*, which you described in your letter, dated March 20, 1996. Those actions included: (1) designation of a single officer, reportable to the Chief Nuclear Officer, responsible for the overall implementation of the program for handling employee concerns; (2) plans to develop a set of actions to address, among other things, Nuclear Safety Concerns Program enhancements, as well as the contractor programs; and (3) plans to revise certain group policies, and related training. However, credit was not given for your corrective actions because many of these actions are still in the planning phase even though the DOL had concluded, as early as the District Director's Decision on July 27, 1995, that discrimination occurred.

Therefore, to emphasize the importance of maintaining a work environment in which employees are free to engage in protected activities without fear of retaliation, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the cumulative amount of \$100,000, consistent with the Enforcement Policy because credit was not provided for identification or corrective action.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. Since the NRC enforcement action in this case is based on the Recommended Decision and Order of the DOL ALJ, which is still being reviewed by the Secretary of Labor, you may delay payment of the civil penalty and submission of certain portions of the response as described in the enclosed Notice until 30 days after the final decision of the Secretary of Labor. Notwithstanding your past corrective actions, as most recently documented in your response of March 20, 1996, in that portion of your response which describes corrective steps you have taken, you are required to describe any additional actions that you plan to take to minimize any potential chilling effect arising not only from this incident but other instances of discrimination that have occurred at your facility for which civil penalties have been issued in the past. After reviewing your response to this Notice,

including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

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, Public Law No. 96-511.

Sincerely,

A handwritten signature in dark ink, appearing to read "Thomas T. Martin".

Thomas T. Martin
Regional Administrator

Enclosure: Notice of Violation and Proposed Imposition
of Civil Penalty

Docket Nos. 50-245; 50-336; 50-423
License Nos. DPR-21; DPR-65; NPF-49

cc w/encl:

D. Miller, Senior Vice President, Nuclear Safety and Oversight
S. Scace, Vice President, Reengineering
E. DeBarba, Vice President, Nuclear Technical Services
F. Rothen, Vice President, Maintenance Services
W. Riffer, Nuclear Unit 1 Director
P. Richardson, Nuclear Unit 2 Director
M. Brothers, Nuclear Unit 3 Director
L. Cuoco, Esquire
W. Meinert, Nuclear Engineer
V. Juliano, Waterford Library
State of Connecticut SLO Designee
We the People

ENCLOSURE

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Northeast Nuclear Energy Company
Millstone Nuclear Power Plant

Docket Nos. 50-245; 50-336; 50-423
License Nos. DPR-21; DPR-65; NPF-49
EA 96-059

Based on the Recommended Decision and Order by a DOL Administrative Law Judge, dated December 12, 1995, (Reference: DOL cases Nos. 95-ERA-18 and 95-ERA-47), a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violation and associated civil penalty is set forth below:

10 CFR 50.7(a), in part, prohibits discrimination by a Commission licensee against an employee or contractor employee for engaging in certain protected activities. Discrimination includes discharge and other actions that relate to compensation, terms, conditions, or privileges of employment. The protected activities are established in Section 211 of the Energy Reorganization Act (ERA) of 1974, as amended, and in general are related to the administration or enforcement of a requirement imposed under the Atomic Energy Act (AEA) or the Energy Reorganization Act. The protected activities include but are not limited to providing the Commission information about alleged violations of the ERA or the AEA or possible violations of requirements imposed under either of these statutes.

Contrary to the above, as determined in the DOL Administrative Law Judge's Recommended Decision and Order in case 95-ERA-18 and 47, dated December 12, 1995, Northeast Nuclear Energy Company (NNECO) discriminated against Adam McNiece, a senior health physics technician for engaging in protected activities. (01013)

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

Pursuant to the provisions of 10 CFR 2.201, Northeast Nuclear Energy Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of the final decision of the Secretary of Labor. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, and (2) the reasons for the violation if admitted, and if denied, the reasons why. In addition, also pursuant to the provisions of 10 CFR 2.201, the Licensee is required to submit a written statement or explanation within 30 days of the date of this Notice of Violation and should include for each alleged violation: (1) the corrective steps that have been taken and the results achieved, (2) the

corrective steps that will be taken to avoid further violations, and (3) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within 30 days of the final decision of the Secretary of Labor in this case, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, and the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at King of Prussia, Pennsylvania
this 4th day of June 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

June 6, 1996

EA 96-111
EA 94-067

Mr. Stephen M. Quennoz, Acting Vice
President and Chief Nuclear Officer
Portland General Electric Company
Trojan Nuclear Plant
71760 Columbia River Highway
Rainier, Oregon 97048

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$50,000
(NRC INVESTIGATION CASE NOS. 5-91-012 & 5-91-013)

Dear Mr. Quennoz:

This is in reference to Portland General Electric's (PGE) May 6, 1996 response to the NRC's April 5, 1996, letter which identified two examples of an apparent violation of 10 CFR 50.9. As described in more detail in the NRC's April 5 letter, the apparent violations involved: 1) the falsification of Operability Determination Notice (ODN) 90-64, Revisions 0 and 1, and Justifications for Continued Operation (JCOs) dated July 11 and October 3, 1990; and 2) the submission to the NRC of inaccurate and incomplete information in Licensee Event Report (LER) 91-11, Revisions 0 and 1, dated June 10, 1991, and October 28, 1991, respectively. The NRC's April 5 letter stated that the NRC was considering escalated enforcement action for these apparent violations and requested a written response from PGE prior to an enforcement decision being made.¹

PGE's May 6, 1996, response acknowledged that PGE failed to meet the requirements of 10 CFR 50.9, Completeness and Accuracy of Information, in both instances. PGE identified these two violations and contracted with Stier, Anderson & Malone (SAM) to investigate both issues. In its May 6, 1996 letter, PGE stated that the individuals who were the primary focus of the SAM investigations were no longer employed by PGE; and that PGE's corrective actions taken in response to the SAM investigations provide reasonable assurance that PGE is currently in compliance with 10 CFR 50.9.

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¹ The NRC's letter gave PGE the option of responding in writing or requesting a predecisional enforcement conference. PGE elected to respond in writing.

PGE's stated corrective actions included: contracting with SAM to investigate the concerns; suspending the individual involved in the first apparent violation and reviewing a sample of his work; replacing the affected equipment, i.e., Raychem splices and electrical penetration assembly (EPA) seals; counseling of the individuals involved as to both violations; removing the signature authority of an involved manager as to certain documents, resulting in increased oversight of the manager; revising LER 91-011 by submitting Revision 2 to correct deficiencies identified by SAM in Revisions 0 and 1; and training of Trojan managers and supervisors on the NRC's Deliberate Misconduct Rule and incorporating this training into General Employee Training and retraining programs. PGE also cited steps being taken to avoid further violations, including additional training in the requirements of 10 CFR 50.9 and responsibilities relative to assuring the completeness and accuracy of information provided to the NRC.

The NRC's April 5 letter also requested PGE's view with respect to whether the violations were committed willfully. Regarding the first apparent violation, PGE's May 6 response stated that PGE accepted SAM's conclusion that the individual involved in preparing the ODNs and JCOs knew when he formulated the analysis in the ODNs and JCOs that it contained inaccurate and misleading information. The NRC's Office of Investigations reached this same conclusion (Investigation Report No. 5-91-012), as we stated in our April 5 letter. Regarding the second apparent violation, PGE's May 6 response stated that because the two involved individuals are no longer PGE employees and had not been available to meet with management, it had not drawn final conclusions about the conduct of the individuals involved in submitting the inaccurate LER to the NRC.

Based on the NRC's review of all available information, including the results of its own investigation of the first matter, the NRC has determined that violations of 10 CFR 50.9 did occur in both instances. The violations are described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty. The NRC recognizes that these violations were discovered largely as the result of efforts undertaken by current Trojan management and do not reflect the performance of current management. The NRC also notes that these violations occurred in 1990 and 1991, prior to a decision to shut down and decommission the Trojan facility. Nonetheless, these violations are significant today and warrant appropriate dispositioning because: 1) the information involved was important at the time with respect to the safety and continued operation of the facility; 2) the 1990 violation involving inaccurate ODNs and JCOs resulted from apparent willfulness; 3) the violations are the result of significant management failures to address the underlying technical issues as well as to establish an appropriate climate for being candid with the NRC with regard to these issues; and 4) the licensee, during the decommissioning process, will be submitting information to the NRC that must be complete and accurate.

Thus, each of the violations in the enclosure has been classified at Severity Level III in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," (Enforcement Policy), NUREG-1600. As stated in

the Enforcement Policy, published June 30, 1995, a civil penalty (with a base value of \$50,000) is considered for a Severity Level III violation and is normally based on the NRC's determination of whether credit is warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2. In the case of the earlier violation, that involving the 1990 ODNs and JCOs, the NRC is not assessing a civil penalty because the violation occurred more than five years ago and therefore exceeds the statute of limitations for considering civil penalties.

In the case of the second violation, that involving LER 91-011, Revisions 0 and 1, the NRC acknowledges that PGE would deserve credit under both the identification and corrective action factors, for reasons previously discussed. Notwithstanding consideration of these factors, the NRC notes that the circumstances surrounding this violation involved significant management failures, including improper operational safety decisionmaking by senior PGE management and the plant review board, and failures to adequately address problems with the EPA seals in 1987-1990. Also, in that timeframe, PGE management failed in its responsibilities by providing the NRC with information in a manner that discouraged NRC's regulatory scrutiny (for example, the misinforming of the NRC about Trojan's official determination of the root cause of a 1987 EPA seal failure (LER 87-11)). The resulting pattern of misinforming the NRC culminated in the inaccurate, incomplete and misleading information in LER 91-11, revisions 0 and 1. Based on these significant management failures, the NRC has determined that the circumstances surrounding this violation warrant the exercise of discretion under Section VII.A.1 of the Enforcement Policy.

Therefore, to emphasize the significance of the management failures that led to this violation, and the importance of effective management processes to assure that information provided to the NRC is complete and accurate in all material respects, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) in the amount of \$50,000 for this Severity Level III problem. The NRC notes that if it were not for the fact that Trojan has a new management team, that the plant has permanently ceased operations, and the current management keeps the NRC staff informed of onsite activities, the NRC would have considered a civil penalty up to the statutory limit of \$100,000.

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

Portland General Electric
Company

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In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information).

Sincerely,

L. J. Callan
Regional Administrator

Docket No. 50-344
License No. NPF-1

Enclosures:

1. Notice of Violation
2. Proposed Imposition of Civil Penalty

cc w/Enclosures:

Portland General Electric Company
Trojan Nuclear Plant
ATTN: Harold K. Chernoff, Manager Licensing
Compliance and Commitment Management
71760 Columbia River Highway
Rainier, Oregon 97048

Board of County Commissioners
ATTN: Michael J. Sykes
Board of County Commissioners
Columbia County
St. Helens, Oregon 97501

Oregon Department of Energy
ATTN: David Stewart-Smith
625 Marion Street NE
Salem, Oregon 97310

Portland General Electric
Company

-5-

Mr. Lloyd K. Marbet
19142 S.E. Bakers Ferry Road
Boring, Oregon 97009

Do It Yourself Committee
ATTN: Jerry Wilson
570 N.E. 53rd
Hillsboro, Oregon 97124

Northwest Environment Advocates
ATTN: Eugene Roselie
133 S.W. 2nd Avenue
Portland, Oregon 97204

Oregon Radiation Control Program

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Portland General Electric Company
Trojan Nuclear Plant

Docket No. 50-344
License No. NPF-1
EAs 94-067 and 96-111

During an NRC investigation conducted September 11, 1991 through March 11, 1994, and the NRC's review of Portland General Electric Company's investigative report submitted by its contractor to the NRC on February 15, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

I. Violation Assessed a Civil Penalty

10 CFR 50.9(a) requires, in part, that information provided to the Commission by a licensee be complete and accurate in all material respects.

- A. Contrary to the above, the licensee did not provide to the Commission information that was complete and accurate in all material respects. Specifically, on June 10, 1991, the licensee submitted LER 91-11 which was incomplete and inaccurate in that the LER did not describe: the electrical function of the electrical penetration assembly seals; the information from the vendor regarding the life of the seals; and the licensee's inadequate responses to previous seal issues. This information was material because the correct information would likely have resulted in substantial further inquiry by the NRC. (01013)
- B. Contrary to the above, on October 28, 1991, the licensee submitted LER 91-11, Revision 1, which was incomplete and inaccurate in a material respect in that the LER did not describe: the function of the inboard seal, the vendor information related to the reduced life of the seals, and the correct statement regarding the licensee's official cause of the 1987 seal failure. This information was material because the correct information would likely have resulted in substantial further inquiry by the NRC. (01023)

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

II. Violation Not Assessed a Civil Penalty

10 CFR 50.9(a) requires, in part, that information provided to the Commission by a licensee be complete and accurate in all material respects.

Contrary to the above, the licensee did not provide to the Commission information that was complete and accurate in all material respects. Specifically, ODN 90-64, Revisions 0 and 1, dated May 11, 1990 and July 4, 1990, and the JCOs dated July 11 and October 3, 1990, incorrectly stated that test parameters from another licensee's tests fully enveloped PGE's equipment qualification parameters; that the test environment conditions include direct chemical spray exposures; that another licensee's test parameters enveloped PGE's plant specific peak in-containment temperature of 303°F; and that a failure during another licensee's test was attributed to a particular cause. This information is material because NRC staff members relied on the false statements in allowing Trojan to restart and continue operation. (02013)

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

Pursuant to the provisions of 10 CFR 2.201, Portland General Electric Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other

reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: Mr. James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, ATTN: Enforcement Officer, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Arlington, Texas,
this 6th day of June 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

October 23, 1996

EA 96-125
EA 96-281

Mr. Leon R. Eliason
Chief Nuclear Officer and President
Nuclear Business Unit
Public Service Electric and Gas Company
Post Office Box 236
Hancocks Bridge, New Jersey 08038

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL
PENALTIES -
\$150,000
(NRC Inspection Reports No. 50-354/96-03 and 50-354/96-06)

Dear Mr. Eliason:

This letter refers to the NRC inspections conducted at the Hope Creek Nuclear Generating Station between February 11 and March 30, 1996, and between June 23 and August 3, 1996. The inspection reports were sent to you on April 26, 1996, and August 29, 1996, respectively. Based on the inspections, apparent violations of NRC requirements were identified. On June 11, 1996, a predecisional enforcement conference was conducted with you and members of your staff to discuss five of the apparent violations identified during the first inspection, their causes, and your corrective actions. Regarding the sixth apparent violation, which was identified during the June-August inspection, you were offered the opportunity to either attend an enforcement conference, or provide a response, and you chose to provide a response, dated September 25, 1996.

Based on our review of the inspection findings, related Licensee Event Reports, information provided during the conference, and information provided in your September 25, 1996 response, six violations are being cited and are described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice). The first two violations relate to the failure to plan appropriate surveillance testing following completion of maintenance on control rod drives and their associated hydraulic operating systems during the November 1995 through March 1996 refueling outage, as well as previous failures to complete such surveillance testing prior to startups in February 1991 and April 1994. The third and fourth violations involve failures to promptly identify and correct conditions adverse to quality regarding (1) 15 pairs of reactor building ventilation supply duct backdraft isolation dampers being installed in a configuration that deviated from plant design requirements, and (2) control rod withdrawal speeds being in excess of the values assumed in the Updated Final

Safety Analysis Report (UFSAR). The fifth violation involves the failure to obtain Commission approval prior to making changes to the facility's service water system design that involved an unreviewed safety question. The sixth violation involved the failure to maintain the service water system in accordance with the Technical Specifications (TS) during the period November 1992 to March 1996 in that the safety auxiliary cooling system (SACS) heat exchanger throttle valves (manual flow path valves) were not properly set which resulted in the service water flow rates to the SACS heat exchangers being insufficient for certain design basis requirements.

With respect to the first two violations (Violations I.A and I.B of the enclosed Notice), the inspectors found that maintenance had been performed on control rods during the November 1995 through March 1996 outage, yet appropriate testing had not been planned to be completed in accordance with the TS prior to restart. This maintenance on the control rods had the potential to affect the scram function of 68 control rods which required surveillance testing. As a result of the failure to follow procedures, you violated an administrative procedure which required that the post-maintenance testing be planned prior to restart. Rather than planning to perform the maintenance prior to the restart, your schedule for performing this required surveillance testing, as noted in your Licensee Event Report (LER) 96-007, was at 40% power after plant startup. Toward the end of the 1996 outage, we concluded that if the NRC had not intervened on March 13, 1996, by questioning a control room operator about completion of the control rod testing, a TS Limiting Condition for Operation violation would have occurred. The second violation in Section I involved two separate previous occasions (in February 1991 and April 1994), in which you made mode changes without completing the required control rod testing prior to plant startup.

The third violation (Violation II.A.1 of the enclosed Notice) involved the failure to correct a condition identified in 1992 involving 15 pairs of reactor building backdraft isolation dampers having been installed backwards. At the enforcement conference, you indicated that this condition was first identified by a contractor in 1984-1985. You were notified of this issue in 1992 and corrective action was not taken at that time to correct the problem. You reviewed the issue during your most recent 1995 refueling outage, and you again decided to defer corrective action. With the dampers installed backwards, the "self-sealing" feature of their design could not be assured, and sufficient analyses were not performed to ensure that the licensing bases of the facility were met with this nonconforming condition. These activities represent nonconservative decision making on your part, since you operated the unit for an extensive period with a known degradation, based on a less than fully rigorous engineering and safety analysis.

With respect to the fourth violation (Violation II.A.2 of the enclosed Notice), on March 14, 1996, during control rod withdrawal time testing, several control rods were found to withdraw faster than allowed by procedure HC.OP-FT.BF-0001, "Control Rod Drive Insertion and Withdrawal Speed Test Adjustment and Stall Flows. In each case, the corrective action

consisted of adjusting the rod to the desired speed, with no effort to evaluate the significance of the misadjusted rods during previous operation or determine the cause of the "out of tolerance" rods. Subsequent to questions raised by the NRC inspector, an analysis was performed that concluded the "as-found" rod speeds measured during this 1996 testing were bounded by analysis. However, it was evident during this inspection that your organization lacked an appropriate appreciation of the safety significance of control rod withdrawal speed. In addition, further review identified that on May 10, 1992, a control rod was found to be traveling at a speed in excess of that allowed by the UFSAR and was not corrected until October 12, 1992. It was also travelling in excess of that allowed by a later analysis conducted on March 15, 1996. Therefore, as described in the fourth violation, you operated the plant during this period without taking corrective actions to address a condition outside the design basis.

With respect to the fifth violation (Violation II.B of the enclosed Notice), changes were made to the facility (as described in the UFSAR) involving unreviewed safety questions, without prior Commission approval. Specifically, in February 1996, you implemented a design change which would automatically open the main backwash valve for the service water system strainers whenever the associated service water pump started, and leave the valve open as long as the pump was running, rather than maintain that valve in the normally closed position. Prior to the modification, the valve would automatically open for short periods either via a timer or a high differential pressure across the strainers, in order to backwash the strainers. This modification constituted an unreviewed safety question because it reduced the margin of safety, as defined in the TS basis, in that it decreased the amount of station service water system flow available for the SACS by diverting some of the flow away from the heat exchangers in order to backwash the strainers.

Prior to implementation of the modification, you identified via calculations, that with the valve open, backwash flow through the service water (SW) pump discharge strainers was 2500 gallons per minute (gpm) which was much greater than the 430 gpm assumed in the UFSAR. Although your staff completed an Action Request to correct the UFSAR, you did not consider this discrepancy important for the purposes of this modification because a flow balance had been performed in 1992 which had verified adequate flow through the SACS heat exchangers with the backwash valve fully open. However, in the revised safety evaluation completed after implementation of the modification, you stated that you discovered that flow measurements taken during post-modification testing did not compare favorably to SW flow benchmarks, thereby invalidating the earlier assumption regarding the amount of backwash flow not being important. Rather than close the valve, you allowed the condition to continue and compensated for it in the revised 10 CFR 50.59 safety evaluation done to support the modification, by administratively limiting the ultimate heat sink (UHS) temperature to 84.6 degrees F, a value less than the TS limit of 88.6 degrees F. This temporary reduction in UHS water temperature was made to ensure design basis heat removal requirements could be met until a complete service water flow balance could be conducted following plant restart.

You approved this design change in March 1996 and continued to control the system with this administrative limit substituted for a TS limit, rather than closing the valve, or obtaining a change to the TS.

At the enforcement conference, you maintained that an administrative limit could be substituted for the TS limit for the UHS, since the administrative limit was more conservative than the TS limit. In support of this contention, you referenced a previous WNP-2 case where conservative administrative limits were used in lieu of a TS. You stated that the licensee in that case took the position that "a proposed change that involves the need to control plant operation in a manner more conservative than that required by the TS does not require NRC approval prior to implementation." Notwithstanding your contention, while the inspection guidance in NRC Generic Letter (GL) 91-18 acknowledges the use of administrative controls when degradations are discovered at a facility, that guidance was not intended to condone the use of such controls when a degradation is either created or perpetuated by a licensee's actions, since this condition would be under direct licensee control. Thus, since you created the condition by opening the valves, and then perpetuated the condition by making the modification permanent, the circumstances involved an unreviewed safety question arising from a change in the plant operation, rather than a corrective measure to promptly resolve a nonconforming condition in the existing plant design. The NRC position on this matter is stated in NRC Inspection Manual, Part 9900, issued April 9, 1996, which states a licensee may change the design of its plant, as described in the FSAR, in accordance with 10 CFR 50.59; however, whenever such a change involves an unreviewed safety question, or change in the TS, the licensee must obtain a license amendment prior to operating the plant with the nonconforming condition. With regard to your reliance upon the WNP-2 case, the NRC cited the licensee in that case for a violation involving converting safety-related service water system motor operated valves to manually operated valves. The statement by the licensee that a "proposed change that involves the need to control plant operation in a manner more conservative than that required by the TS does not require NRC approval prior to implementation" does not reflect the position of the NRC relative to unreviewed safety questions. Rather, that statement simply reflected that licensee's view.

The NRC is concerned that your independent oversight groups also failed to identify these problems even though opportunities to do so were available in both the past and the present time frame. The independent oversight groups, like the Quality Assurance/Nuclear Safety Review Group and the Station Operations Review Committee, are expected to provide additional assurance that deficiencies either leading to, or resulting from, poor decisions are discovered and corrected. While these issues were ultimately corrected in a manner to avoid significant safety consequences, these actions were completed in response to the NRC's identification of the problems. For the issues that are the subject of these violations, your independent review was neither sufficient nor timely.

These first five violations represent a significant regulatory concern because they indicate that management did not aggressively assure (1) appropriate planning for the testing of equipment following maintenance, (2) timely identification and correction of problems concerning safety related equipment, and (3) appropriate evaluation prior to making changes to the facility. Given the significance of the findings, in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, the first two violations are classified in the aggregate as a Severity Level III problem, the third and fourth violations are also classified in the aggregate as a Severity Level III problem, and the fifth violation is individually classified at Severity Level III.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III problem or violation. Because your facility has been the subject of escalated enforcement actions within the last 2 years¹, the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit is not warranted for *Identification* because you did not identify the violations, other than Violation I.B. Credit is warranted for *Corrective Action* because at the time of the enforcement conference, your actions were considered both prompt and comprehensive. These actions, which were discussed during your presentation at the conference, include, but are not limited to the following: (1) performing an inclusive review of work activities to verify TS compliance, including an Operations Department review of work order activities performed during the outage, departmental reviews of TS requirements under their control, and Independent Quality Assurance/Nuclear Safety Review (QA/NSR) assessment; (2) developing a conditional TS surveillance list; (3) incorporating the post-maintenance event into the licensed operator requalification training; (4) setting all rods to within UFSAR assumed values before completing plant startup from RF06; (5) revising the control rod speed verification testing procedure to be consistent with the UFSAR, and reducing withdrawal speed acceptance criteria from 20% to 10%; (6) performing stroke timing of rods at each Refuel Outage; (7) completing a comprehensive root cause investigation of these concerns; and (8) providing training on the importance of maintaining the design and licensing basis of the facility.

Notwithstanding these corrective actions and consistent with the Enforcement Policy, to emphasize the importance of (1) appropriate planning for the testing of equipment following maintenance, (2) timely identification and correction of problems identified concerning safety related equipment, and (3) appropriate evaluation prior to making changes to the facility, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice in the amount of \$150,000 (a \$50,000 base civil penalty for each of the three Severity Level III violations or problems).

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¹A \$100,000 civil penalty was issued on December 12, 1995 (EA 95-216), based on an inspection that ended August 24, 1995.

With respect to the sixth violation set forth in Section III of the enclosed Notice, you had identified, as described in LER 96-009, that Hope Creek had operated in an unanalyzed condition due to inappropriate service water throttle valve settings. The NRC recognizes that during the period this condition existed, the service water system flow path did in fact provide sufficient cooling to the SACS heat exchangers. Nonetheless, the NRC is concerned that you failed to ensure that following a design change activity to replace the throttle valves during refueling outage 4 in November 1992, appropriate testing was not completed to establish the required throttle valve position and flow to the SACS heat exchangers for all design basis requirements, including expected tide conditions, pump degradation, and worst case ultimate heat sink temperatures.

This violation also represents a significant regulatory concern, and, therefore, is also classified at Severity Level III in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600.

Because your facility has been the subject of escalated enforcement actions within the last two years, the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit is warranted for *Identification* because you did identify the violation as part of an extensive review of the Service Water System in response to the violation concerning the Service Water backwash valve identified in Item II.B. Credit is also warranted for *Corrective Action* because the actions you took were considered both prompt and comprehensive. These actions, which were described in your LER and your September 25, 1996 letter, include, but are not limited to the following: (1) repositioning of the throttle valves to ensure adequate system performance during all postulated design basis conditions; (2) performance of a flow balance to support a design change for the Service Water backwash strainer design change, which verified proper throttle position; (3) enhanced procedures clarifying the requirements for field verification of plant conditions against the assumptions in the engineering evaluations; (4) review of a sampling of engineering evaluations to determine whether appropriate acceptance criteria had been provided; (5) conduct of a Configuration Baseline Document validation review of the Service Water System and the SACS; and (6) plans to conduct a Service Water System Operational Performance Inspection in October and November 1996 to confirm the validity of the design and licensing basis reviews which have been completed.

Therefore, to encourage prompt identification and comprehensive correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty for this violation.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After

reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR. If redactions are required, a proprietary version containing brackets placed around the proprietary, privacy, and/or safeguards information should be submitted. In addition, a non-proprietary version with the information in the brackets redacted should be submitted to be placed in the PDR.

Sincerely,

Hubert J. Miller
Regional Administrator

Docket No. 50-354
License No. NPF-57

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalties

cc w/encl:

L. Storz, Senior Vice President - Nuclear Operations
E. Simpson, Senior Vice President - Nuclear Engineering
E. Salowitz, Director - Nuclear Business Support
C. Schaefer, External Operations - Nuclear, Delmarva Power & Light Co.
P. MacFarland Goelz, Manager, Joint Generation, Atlantic Electric
M. Bezilla, General Manager - Hope Creek Operations
J. Benjamin, Director - Quality Assurance & Nuclear Safety Review
D. Powell, Manager - Licensing and Regulation
R. Kankus, Joint Owner Affairs
A. C. Tapert, Program Administrator
R. Fryling, Jr., Esquire
M. J. Wetterhahn, Esquire
Consumer Advocate, Office of Consumer Advocate
W. Conklin, Public Safety Consultant, Lower Alloways Creek Township
State of New Jersey
State of Delaware

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Public Service Electric and Gas Company
Hope Creek Nuclear Generating Station

Docket No. 50-354
License No. NPF-57
EAs 96-125; 96-281

During NRC inspections conducted between February 11 and March 30, 1996, and between June 23 and August 3, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

I. VIOLATIONS RELATED TO SURVEILLANCE TESTING OF CONTROL RODS
FOLLOWING MAINTENANCE

- A. Technical Specification (TS) 6.8.1.a requires, in part, that written procedures in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, shall be established, implemented and maintained. Sections 8 and 9, respectively, of Appendix A of Regulatory Guide 1.33 specify procedures for performing surveillance tests and for performing safety-related maintenance.

Hope Creek Nuclear Business Unit Administrative Procedure NC.NA-AP.ZZ-0009(Q), Revision 9, Work Control Process, Section 5.3.2.p, and Administrative Procedure NC.NA-AP.ZZ-0050(Q), Revision 3, Station Testing Program, Section 5.1.2, require, in part, that appropriate TS surveillance testing be planned and conducted following maintenance on safety-related equipment.

Contrary to the above, prior to March 13, 1996, the licensee did not plan the appropriate surveillance testing on certain safety-related equipment following maintenance. Specifically, although maintenance had been conducted on 68 control rods (such as packing adjustments on scram inlet or outlet valves, or replacement of scram solenoid pilot valves) during the November 1995 through March 1996 outage, the licensee did not plan for testing the scram insertion capability for the control rods following these maintenance activities that could affect the scram insertion time, but rather planned for deferral of testing until after the plant startup even though the TS would require testing prior to the startup. (01013)

- B. TS Surveillance Requirement 4.1.3.2.b requires, in part, that the maximum scram insertion time of control rods shall be demonstrated for specifically affected control rods following maintenance on the control rod or control rod system which could affect the scram insertion time.

Contrary to the above, on February 15, 1991, the plant started up without completion of surveillance tests required for 24 control rods following maintenance, and on April 25, 1994, the plant was started up without completing the required surveillance testing on two control rods following maintenance. (01023)

These two violations are classified in the aggregate as a Severity Level III problem (Supplement I).

Civil Penalty - \$50,000

II. OTHER VIOLATIONS OF NRC REQUIREMENTS ASSESSED A CIVIL PENALTY

- A. 10 CFR Part 50, Appendix B, Criterion XVI, requires, in part, that measures be established to assure that conditions adverse to quality such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. Also, for significant conditions adverse to quality, measures shall assure that the cause of the condition is determined and corrective action taken to preclude recurrence.

1. Contrary to the above, from January 1992 to February 27, 1996, the licensee did not establish measures to assure that a certain condition adverse to quality was promptly identified and corrected. Specifically, in January 1992, the licensee identified that 15 pairs of High Energy Line Break (HELB) reactor building ventilation supply duct backdraft isolation dampers were installed backwards (since original plant construction) in various reactor building filtration, recirculation, and ventilation system supply ducts. This configuration deviated from plant design requirements, in that the "self-sealing" feature was invalidated, thereby causing a condition adverse to quality, and this condition adverse to quality was not corrected until February 27, 1996. (02013)

2. Contrary to the above:

- a. From May 10, 1992 to October 12, 1992, the licensee did not establish measures to assure that a condition adverse to quality was promptly identified and corrected. Specifically, on May 10, 1992, the flow control needle valve for control rod No. 22-35 was adjusted in an attempt to correct a double notching

condition. This adjustment resulted in a rod withdrawal speed of 5 inches per second, which was in excess of the value of 3.6 inches per second assumed in Section 15.4.1.2 of the Updated Final Safety Analysis Report for rod withdrawal error analysis. The withdrawal speed was also in excess of the speeds bounded by previously performed General Electric analyses. However, the rod withdrawal speed was not corrected until October 12, 1992.

- b. On several occasions prior to March 1996, the withdrawal speeds were in excess of 3.6 inches per second and, although actions were taken in each case to adjust the withdrawal speed to be within limits, the licensee did not establish measures to address the cause of this significant condition adverse to quality. (02023)

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

- B. 10 CFR 50.59(a)(1) states, in part, that the holder of a license may make changes in the facility as described in the safety analysis report, without prior Commission approval, unless the proposed changes involve changes in the TS incorporated in the license, or an unreviewed safety question. 10 CFR 50.59(a)(2) states, in part, that an unreviewed safety question shall be deemed to exist if the margin of safety as defined in the basis of any TS is reduced.

Contrary to the above, the licensee made changes to the facility as described in the Section 9.2.1.4 of the FSAR. Section 9.2.1.4 of the FSAR stated, in part, that a self-cleaning strainer downstream of each station service water pump continuously backwashes a small amount of water via a bypass valve and when the strainer is subjected to an excessive differential pressure, a high differential switch opens the main backwash valve. The changes to the facility involved unreviewed safety questions, without prior Commission approval. Specifically,

- 1. In February 1996, the licensee implemented design change DCP 4EC3546 which would automatically open the main backwash valve whenever the associated service water pump started, and leave the valve open as long as the pump was running, rather than maintain the valve in the normally closed position. The modification constituted an unreviewed safety question because it reduced the margin of safety as defined in the basis of TS 3/4.7.1, "Service Water Systems" in that it

decreased the amount of station service water system flow available for the safety auxiliary cooling system by diverting some of the flow away from the heat exchangers to backwash the strainers. However, this change was made without Commission approval.

2. After installation of design change DCP 4EC3546 which permitted automatic opening of the main backwash valve whenever the associated service water pump started, the licensee discovered that flow measurements taken during post modification testing did not compare favorably to SW flow benchmarks. However, this discrepancy was not considered important because a flow balance completed in 1992 had verified adequate flow through the station auxiliaries cooling system heat exchangers with the backwash valve full open. As a result, the licensee allowed the condition to continue and compensated for it by revising the 10 CFR 50.59 safety evaluation performed to support the modification, by administratively limiting the ultimate heat sink (UHS) temperature to 84.6 degrees F, a value less than the TS limit of 88.6 degrees F. This temporary reduction in UHS water temperature was necessary to ensure design basis heat removal requirements could be met until a complete service water flow balance could be conducted following plant restart. The licensee approved this change in March 1996 and continued to control the system with this administrative limit substituted for a TS limit, rather than closing the valve or obtaining a change to the TS. (02033)

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

III. VIOLATION NOT ASSESSED A CIVIL PENALTY

TS 3.7.1.2 (b) requires, in part, that the service water system loops be comprised of an operable flow path capable of taking suction from the Delaware River (ultimate heat sink) and transferring the water to the Safety Auxiliary Cooling System (SACS) heat exchangers.

Contrary to the above, from November 1992 until March 17, 1996, the service water flow throttle valves to the SACS heat exchangers were improperly set following modification activities in November 1992. As a result, the flow path was not capable of transferring sufficient cooling water from the Delaware River to the SACS heat exchangers for certain design basis postulated operating conditions, namely, extreme low river water level, pump degradation, and high river water temperature.

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

Pursuant to the provisions of 10 CFR 2.201, Public Service Electric and Gas Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalties (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved.

If an adequate reply is not received within the time specified in this Notice, an Order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the cumulative amount of the civil penalties, or may protest imposition of the civil penalties in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties.

In requesting mitigation of the proposed penalties, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing civil penalties.

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

Enclosure

- 6 -

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, and a copy to the NRC Senior Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR. If redactions are required, a proprietary version containing brackets placed around the proprietary, privacy, and/or safeguards information should be submitted. In addition, a non-proprietary version with the information in the brackets redacted should be submitted to be placed in the PDR.

Dated at King of Prussia, Pennsylvania
this 23rd day of October 1996

December 4, 1996

EA 96-410

Southern Nuclear Operating Company, Inc.
ATTN: Mr. D. N. Morey
Vice President
P. O. Box 1295
Birmingham, AL 35201

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -
\$50,000 (NRC INTEGRATED INSPECTION REPORT NOS. 50-348 AND
50-364/96-09)

Dear Mr. Morey:

This refers to the inspection conducted during the period September 1 through October 12, 1996, at your Farley Nuclear Plant (FNP). The inspection included a review of the fire protection program associated with the installation and inspection of Kaowool fire barriers to meet the requirements of Appendix R to 10 CFR Part 50 and the FNP Fire Protection Plan. The results of this inspection were discussed with members of your staff on October 17, 1996, and were formally transmitted to you by letter dated November 8, 1996. In addition, on November 7, 1996, you submitted Licensee Event Report No. 96-006-00 which addressed Kaowool fire barrier installation deficiencies. A closed predecisional enforcement conference was conducted in the Region II office on November 18, 1996, with you and members of your staff to discuss the apparent violations, the root causes, and corrective actions to preclude recurrence. A list of conference attendees, NRC slides, and a copy of your presentation materials are enclosed. In addition, at the conference, you identified errors in and/or disagreement with certain statements expressed in the subject inspection report. The disposition of your comments in this regard are also enclosed.

Based on the information developed during the inspection and the information that was provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice), and the circumstances surrounding them are described in detail in the subject inspection report. The violation described in Part I of the Notice involved three examples of Southern Nuclear Operating Company Inc.'s (SNC) failure to assure that one-hour fire barriers, in this case Kaowool enclosures, were installed on Unit 1 electrical cables associated with systems required for safe shutdown. The components affected by the discrepant conditions were the dedicated B Train high head safety injection pump and its room cooler; the swing high head safety injection pump and its room cooler when aligned to the B Train; one B Train main steam line isolation valve; and the B Train motor driven auxiliary feedwater pump discharge flow control valves. The Kaowool in these areas was not installed as described in design drawings and your 10 CFR Part 50, Appendix R commitments.

At the conference, you admitted the violation and provided additional background information related to the circumstances surrounding the discrepancies and their identification. You described the root causes of the violation as personnel error and insufficient design guidance during initial installation, and stated that there was no reason to believe that a breakdown in your configuration management program occurred.

Although the failure to install Kaowool fire barriers adequately did not result in an actual safety consequence, under certain circumstances, a fire could have adversely impacted your ability to achieve and maintain safe plant shutdown conditions (e.g., loss of charging). Overall, the violation is of significant regulatory concern in that the degraded fire barriers increased the vulnerability of safety related equipment to potential fire hazard or damage and compromised the design objective of defense-in-depth. At the conference you stated that alternate methods were available to mitigate the consequences of a fire affecting these safety related components. Although NRC agrees that alternate methods were available to mitigate the consequences of a fire, several of these methods rely on operator recognition and intervention which are not proceduralized and cannot be assured for 10 CFR 50, Appendix R compliance; and, the fire suppression system relied upon to mitigate a fire involving both trains of high head safety injection experienced failures during April 1994 and 1995 surveillance testing. Furthermore, NRC is concerned that your independent verification program at the time of initial installation (implemented by your construction organization) failed to identify the non-conformances, as has your periodic inspection program since then. This resulted in unknown, degraded fire barriers for an extended period of time. Therefore, this violation is classified in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III violation.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has not been the subject of escalated enforcement action within the last two years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process described in Section VI.B.2 of the Enforcement Policy. At the conference, you stated that your corrective actions taken and/or planned include: (1) the prompt establishment of fire watches; (2) the conduct of a walk-down of motor-operated valve Kaowool installations following identification of deficiencies by the NRC; (3) conduct of a comprehensive inspection of all Kaowool installations in the plant utilizing newly trained, Level II inspectors; (4) correction of identified Kaowool installation discrepancies by January 31, 1997; (5) revision of Procedure FNP-0-FSP-43 to clearly identify the appropriate Kaowool periodic inspection criteria by January 31, 1997; and (6) conduct of additional training for the individuals who will implement the periodic inspection program. Although it appears that your corrective actions were ultimately comprehensive, the NRC determined that credit was not warranted for *Corrective Action* in that, collectively, your actions were not timely. Specifically, NRC identification of multiple examples of Kaowool and flammastic installation discrepancies over a several month period was required before you took comprehensive corrective actions. Although engineering

reviews and evaluations were being performed as issues were identified, you did not institute the necessary positive actions to assess the extent of the condition and to characterize the Kaowool fire barrier discrepancies fully until NRC identified examples of missing Kaowool.

Therefore, to emphasize the importance of maintaining an adequate fire protection program for the protection of safety related equipment and the need for prompt and comprehensive corrective actions, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice in the base amount of \$50,000 for the Severity Level III violation.

The violation described in Part II of the Notice has been categorized at Severity Level IV. It involved the failure to adequately implement a program for the periodic inspection of Kaowool installed fire barriers. These inadequate inspections, lack of qualified inspectors, and incomplete inspection criteria contributed to failure to identify the Kaowool installation and material condition discrepancies earlier.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will consider your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

Original Signed by E. W. Merschoff

Stewart D. Ebnetter
Regional Administrator

Docket Nos. 50-348, 50-364
License Nos. NPF-2, NPF-8

- Enclosures:
1. Notice of Violation and Proposed Imposition of Civil Penalty
  2. Conference Attendees (Not to be Published in NUREG-0940)
  3. Comments on Inspection Report No. 96-09 (Not to be Published in NUREG-0940)
  4. NRC Presentation Materials (Not to be Published in NUREG-0940)
  5. Licensee Presentation Materials (Not to be Published in NUREG-0940)

cc w/encs: (See Page 4)

SNC

4

cc w/encls:

M. J. Ajluni, Licensing
Services Manager, B-031
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Company, Inc.
42 Inverness Center Parkway
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General Manager, Farley Plant
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J. D. Woodard
Executive Vice President
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State Health Officer
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Chairman
Houston County Commission
P. O. Box 6406
Dothan, AL 36302

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Southern Nuclear Operating Company, Inc.
Farley Nuclear Plant

Docket Nos. 50-348, 50-364
License Nos. NPF-2, NPF-8
EA 96-410

During an NRC inspection conducted during the period September 1 through October 12, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the NRC proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

I. Violation Assessed A Civil Penalty

10 CFR Part 50, Appendix R, Section III.G.2 requires, in part, where cables or equipment, including associated non-safety circuits that could prevent operation or cause maloperation of redundant trains of systems necessary to achieve and maintain hot shutdown conditions, are located within the same fire area outside of containment, the cables and equipment and associated non-safety circuits be separated by a fire barrier having a three-hour rating, or separated by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards, or one redundant train be enclosed in a fire barrier having a one-hour rating.

License No. NPF-2, Condition 2.C(4), for Farley Nuclear Plant (FNP), Unit 1, states, in part, that Southern Nuclear Operating Company, Inc. shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report (FSAR).

FSAR, Appendix 9B, Fire Protection Program, documents an evaluation of the FNP fire protection program as it complies with Appendix R to 10 CFR 50 and embodies the contents of the Fire Protection Program Reevaluation as approved by the NRC. Appendix 9B, Attachment B, 10 CFR 50 Appendix R Exemptions, provides the NRC's discussion and evaluation of the licensee's Appendix R exemption requests, and also identifies those systems and components that require one-hour Kaowool fire barriers to meet Appendix R.

Contrary to the above, the licensee failed to assure that electrical cables associated with systems necessary to achieve and maintain hot shutdown conditions were enclosed in an one-hour fire barrier as required by Appendix 9B of the FSAR as evidenced by the following examples:

1. On October 2, 1996, the NRC identified that the 1B and 1C Safety Injection Pump "B train" power cables in Room 160 of Fire Area

Enclosure 1

1-004 were not fully enclosed by a Kaowool fire barrier (approximately 18 feet of cable tray was unwrapped).

2. During the period of October 5-8, 1996, the licensee identified that the 1B and 1C Safety Injection Pump "B train" power cables and room cooler cables in Room 175 of Fire Area 1-004 were not fully enclosed by Kaowool fire barriers (approximately 24 inches of cable from four cable trays were unwrapped).
3. During the period of October 5-8, 1996, the licensee also identified that the cables for main steam isolation and auxiliary feedwater flow control in Room 319 of Fire Area 1-042 were not enclosed by an appropriate fire barrier, i.e., Kaowool, (the entire four foot span of cable tray was unwrapped). (01013)

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

II. Violation Not Assessed A Civil Penalty

License No. NPF-2, Condition 2.C(4), and License No. NPF-8, Condition 2.C(6), states, in part, that Southern Nuclear Operating Company, Inc. shall implement and maintain in effect all provisions of the approved fire protection program as described in the FSAR.

FSAR, Appendix 9B, Fire Protection Program, documents the evaluation of the FNP fire protection program against Appendix R to 10 CFR 50 and embodies the contents of the Fire Protection Program Reevaluation as approved by the NRC.

FSAR, Appendix 9B, Section 9B.6.1, requires periodic inspections of fire protection systems and equipment to assure acceptable condition of these items. Administrative Procedure, FNP-0-AP-36, Fire Surveillance Procedures and Inspections, Revision 12, required that fire surveillance procedures are performed as written, by qualified personnel, and that these procedures provide the necessary detailed requirements.

Fire Surveillance Procedure, FNP-0-FSP-43, Visual Inspection of Kaowool Wraps, Revision 5, provided the acceptance criteria, instructions, and references to installation details for conducting periodic inspections of Kaowool wraps used to provide the one-hour rated fire barriers prescribed by the Fire Protection Program of FSAR, Appendix 9B.

Contrary to the above, the licensee failed to implement an adequate periodic inspection program for Kaowool one-hour fire barriers in that:

1. The periodic inspections failed to verify that Kaowool fire barriers were being maintained in conformance with installation drawings and the acceptance criteria specified in

Notice of Violation and Proposed   3
Imposition of Civil Penalty

Procedure FNP-0-FSP-43. During the period March 4-7, 1996, licensee personnel inspected Kaowool wraps in accordance with Procedure FNP-0-FSP-43 and did not identify any deficiencies. However, from July 24 - October 2, 1996, the NRC identified multiple examples of installation deficiencies and deteriorating conditions of Kaowool wraps. Subsequent inspections by the licensee conducted during the period October 5-8, 1996, identified over a hundred similar installation and degradation problems with existing Kaowool wraps around electrical raceways.

2. Personnel performing the periodic inspection required by Procedure FNP-0-FSP-43 during March 1996 were not qualified, in that they were not knowledgeable regarding the design, installation, or material condition requirements for Kaowool wraps. These individuals were not adequately trained on Kaowool requirements nor did they have adequate prior experience in installing or inspecting Kaowool.
3. As of October 12, 1996, Procedure FNP-0-FSP-43, Revision 5, did not clearly identify all the critical characteristics to be inspected to assure Kaowool fire barriers were maintained in conformance with installation drawings (e.g., flammastic fire seals and compression). (02014)

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

Pursuant to the provisions of 10 CFR 2.201, the Southern Nuclear Operating Company, Inc. (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear

Notice of Violation and Proposed   4
Imposition of Civil Penalty

Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: Mr. James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II and a copy to the NRC Resident Inspector at the Farley Nuclear Plant.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Atlanta, Georgia
this 4th day of December 1996

LIST OF PREDECISIONAL ENFORCEMENT CONFERENCE ATTENDEES
NOVEMBER 18, 1996

Southern Nuclear Operating Company, Inc. (SNC)

J. Woodard, Executive Vice President, SNC
D. Morey, Vice President, SNC
R. Hill, Plant Manager, Farley Nuclear Plant (FNP)
D. Jones, Engineering Manager, FNP
J. Thomas, Manager, Engineering Support, FNP
J. McGowan, Manager, Safety Assessment and Evaluation Review
L. Bailey, Project Engineer, SNC
J. Love, Bechtel

Nuclear Regulatory Commission

L. Reyes, Deputy Regional Administrator, Region II (RII)
E. Merschoff, Director, Division of Reactor Projects (DRP), RII
J. Jaudon, Deputy Director, Division of Reactor Safety (DRS), RII
C. Evans, Regional Counsel
B. Uryc, Director, Enforcement and Investigations Coordination Staff (EICS),
RII
H. Berkow, Director, Projects Directorate II-2, Office of Nuclear Reactor
Regulation (NRR)
P. Skinner, Chief, Branch 2, DRP, RII
D. Verrelli, Acting Chief, Special Inspection Branch, DRS, RII
T. Ross, Senior Resident Inspector, FNP
R. Caldwell, Resident Inspector, FNP
R. Wright, Project Engineer, DRP, RII
R. Carroll, Project Engineer, DRP, RII
W. Miller, Reactor Inspector, DRS, RII
A. Boland, Enforcement Specialist, EICS, RII
E. Connell, Fire Protection Engineer, Plant Systems Branch, NRR*

* Participated by Telephone

Enclosure 2

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

August 23, 1996

EA 96-210

Mr. Ross Barkhurst
President and CEO
Vermont Yankee Nuclear Power Corporation
RD 5, Box 169
Ferry Road
Brattleboro, Vermont 05301

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL
PENALTY - \$50,000
(NRC Inspection Report No. 50-271/96-07)

Dear Mr. Barkhurst:

This letter refers to the NRC special inspection conducted from June 3 through June 14, 1996, at the Vermont Yankee Nuclear Power Station. The purpose of this inspection was to review the circumstances surrounding your staff's identification, on April 11, 1996, of a single failure vulnerability of the residual heat removal (RHR) system. This single failure vulnerability existed because of the potential for the minimum flow valve in each train not opening, as needed, to ensure that the pumps were not "dead-headed" if reactor system pressure exceeded the pump head. The inspection report was sent to you on July 2, 1996. Based on the inspection, two apparent violations of NRC requirements were identified, as described in the inspection report. On July 23, 1996, a predecisional enforcement conference was conducted with you and members of your staff to discuss the apparent violations identified during the inspection, their causes, and your corrective actions.

Based on our review of the inspection findings, your related Licensee Event Report (LER) No. 96-010, dated May 9, 1996, and information provided during the conference, one violation is being cited and is described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice). The violation involves the failure to include an analysis of the most damaging single failure vulnerability for certain loss of coolant accidents (LOCAs) in the analysis of possible failure modes of Emergency Core Cooling System (ECCS) equipment and the effects of those failure modes on ECCS performance. Specifically, the analyses performed for each operating cycle since 1974, pursuant to 10 CFR Part 50, Appendix K, including the most recent Cycle 16, 17, and 18 analyses conducted in the past five years, did not consider a specific single failure vulnerability that existed for certain LOCAs. The condition involved intermediate and small break LOCAs in which the four RHR pumps (two per train) would receive a signal to start but would not be able to inject water to the vessel because reactor pressure would be greater than the pump's discharge pressure. In those cases, the possibility existed for damage to the RHR pumps because the motor-operated minimum flow valves (one per train) were normally closed, and if there was a failure of the related Emergency Diesel Generator (EDG), the valves would not automatically open and permit recirculation flow to provide pump cooling. The condition existed since 1974 when a design change was implemented that resulted in cross powering the

two RHR pumps in each train from separate EDGs (the minimum flow valve for that particular train was also powered from one of the two station EDGs). As a result, a loss of a single EDG that powered the minimum flow valve for a particular train would disable not only the RHR pump powered by the inoperable EDG, but also could result in damage to the RHR pump powered by the other operable EDG because of the inability to open the minimum flow valve and establish pump cooling. The failure to consider this condition during the various analyses constitutes the violation of 10 CFR Part 50, Appendix K.

The NRC recognizes and commends your Appendix R Project Team that identified this single failure vulnerability in April 1996, as part of its Appendix R review. Nonetheless, the NRC is concerned that this condition existed for 22 years without being identified during any of the Cycle analyses, even though a number of plant and industry operating events and activities related to the RHR system had been reviewed and evaluated by your staff, as you acknowledged at the enforcement conference, and these reviews and evaluations should have resulted in the identification and correction of this problem much sooner. These opportunities included during: (1) the formulation of corrective actions to address a similar single failure vulnerability affecting the RHR Service Water Heat Exchanger outlet valves that was identified in July 1989 and documented in LER 89-09; (2) the design review activities involving the development of the Individual Plant Evaluation in December 1993, that correctly modeled this single failure issue, but failed to identify the vulnerability; (3) the June 1993, LOCA Reanalysis conducted by your staff for Cycle 17 operation that did not revalidate the previous LOCA analysis assumptions; and (4) the review of Revision 48, dated January 4, 1995, to Piping and Instrument Diagram (P&ID) G-191172, which was a Corrective Update to revise the P&ID to specifically indicate that the RHR minimum flow valves (V10-16A and V10-16B) were normally closed (although the valve position had been changed in 1971 during construction from "normally open" to "normally closed" because of concerns about a draindown of the reactor to the suppression pool, the P&ID had never been updated to reflect that change). In each case, the reviews were apparently too narrowly focused and/or insufficient in scope or depth to identify the vulnerability. Given the significance of this finding, the violation has been categorized at Severity Level III, in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Your facility has been the subject of escalated enforcement actions within the last 2 years¹, therefore, the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit is warranted for *Identification* because you identified the violation. Credit also is warranted for *Corrective Actions* because your corrective actions, once the violation was identified, were considered prompt and comprehensive. These actions, which were discussed during your presentation at the conference, include, but are not limited to: (1) performance of an engineering evaluation to

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¹A Severity Level III violation (identified in November 9, 1995) without a civil penalty was issued on February 13, 1996, for violations of 10 CFR Part 50, Appendix R (EA 95-268), and a Severity Level III violation (identified in April 25, 1995) with a \$50,000 civil penalty was issued on July 5, 1995, for inoperable core spray injection valves (EA 95-070)).

assess the significance of the issue; (2) performance of a 10 CFR 50.59 analysis to support repositioning the RHR minimum flow valves to "normally open" so as to allow minimum flow even in the event of a loss of the related EDG; (3) review of all plant programs to ensure that the correct position of the RHR minimum flow valves was reflected in each program; (4) examination of all ECCS for susceptibility to a single failure vulnerability; (5) update of the RHR system plant engineering drawings and UFSAR description regarding the minimum flow valve position and the LOCA analysis scenario; (6) review of the design change process to determine if any weaknesses remain that could result in similar problems with plant engineering drawings, specifications, and operating procedures; and (7) conduct of engineering staff training regarding the need for comprehensive, rather than narrowly focused, reviews of operating experience reports.

Since credit is warranted for both identification and corrective actions, a civil penalty would not normally be issued in accordance with the civil penalty assessment process set forth in the Enforcement Policy. However, given the length of time (approximately 22 years) that this condition existed, as well as the number of prior opportunities that existed to identify and correct this violation sooner, I have been authorized, after consultation with the Director, Office of Enforcement, to exercise enforcement discretion in accordance with Section VII.A.1 of the Enforcement Policy and issue the enclosed Notice that assesses a civil penalty at the base amount of \$50,000.

The second apparent violation identified in the inspection report, involving the failure to take corrective action for particular aspects of the RHR system single failure vulnerability has been factored into the enclosed Notice and discussed in the description of missed opportunities that existed to identify the violation of Appendix K and is not being cited separately.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Vermont Yankee Nuclear Power
Corporation

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The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96.511.

Sincerely,

A handwritten signature in dark ink, appearing to read 'H. Miller', followed by a large, stylized flourish or initial.

Hubert J. Miller
Regional Administrator

Docket No. 50-271
License No. DPR-28

Enclosure: Notice of Violation and Proposed Imposition of
Civil Penalty

ENCLOSURE

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Vermont Yankee Nuclear Power Corporation
Vermont Yankee Nuclear Power Station

Docket No. 50-271
License No. DPR-28
EA 96-210

During an NRC inspection conducted from June 3 through June 14, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violation and associated civil penalty are set forth below:

10 CFR Part 50, Appendix K, Section D.1, Single Failure Criterion, requires, in part, that an analysis of possible failure modes of Emergency Core Cooling System (ECCS) equipment and of their effects on ECCS performance must be made. In carrying out the accident evaluation, the combination of ECCS subsystems assumed to be operative shall be those available after the most damaging single failure of ECCS equipment has taken place.

Contrary to the above, prior to April 26, 1996, the licensee did not perform an analysis of possible failure modes of ECCS equipment and of their effects on the ECCS performance that included an analysis of the most damaging single failure vulnerability of the ECCS equipment for certain loss of coolant accidents (LOCAs). Specifically, LOCA analyses performed for operating Cycles 17 and 18 by licensee staff, and the LOCA analyses performed by contractor (General Electric) staff for Cycle 16, and earlier, (performed pursuant to 10 CFR Part 50, Appendix K) did not evaluate or acknowledge the single failure vulnerability that existed for certain loss of coolant accidents. In particular, for certain intermediate or small break LOCAs, a single failure vulnerability existed since 1974 in that for each train of the Residual Heat Removal (RHR) System, the two pumps per train were powered from separate emergency diesel generators (EDGs), and the minimum flow valve for the train, which was normally closed, was powered from one of those EDGs. A loss of the EDG that powered the minimum flow valve for that train would disable not only the RHR pump powered by that same EDG, but also could result in damage to the RHR pump powered by the other EDG because of the lack of minimum flow for pump cooling. (01013)

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

Pursuant to the provisions of 10 CFR 2.201, Vermont Yankee Nuclear Power Corporation (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly

marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved.

If an adequate reply is not received within the time specified in this Notice, an Order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation(s) listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, and a copy to the NRC Senior Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR. If redactions are required, a proprietary version containing brackets placed around the proprietary, privacy, and/or safeguards information should be submitted. In addition, a non-proprietary version with the information in the brackets redacted should be submitted to be placed in the PDR.

Dated at King of Prussia, Pennsylvania
this 23rd day of August 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

December 3, 1996

EA 96-273

Mr. R. A. Abdoo
Chairman, President, and
Chief Executive Officer
Wisconsin Energy Corporation
231 West Michigan Street - P440
Milwaukee, Wisconsin 53201

SUBJECT: POINT BEACH NUCLEAR POWER PLANT - UNITS 1 AND 2
NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES -
\$325,000
(NRC Integrated Inspection Report Nos. 50-266/96006; 50-301/96006
and 50-266/96007; 50-301/96007)

Dear Mr. Abdoo:

This refers to the inspections conducted from June 12 through August 23, 1996, at the Point Beach Nuclear Power Plant. The inspections included a review of the conduct of control room activities, plant configuration control, post-maintenance and inservice testing, and conduct of dry cask storage activities. The reports documenting the inspections were sent by letter dated September 5, 1996, and November 6, 1996, and an open pre-decisional enforcement conference was conducted on September 12, 1996.

Based on the information developed during the inspections and the information that was provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice) and the circumstances surrounding the violations are described in detail in the subject inspection reports.

The issues we identified reflect significant weaknesses in the areas of operations, maintenance, and engineering at your Point Beach facility which involve all levels of your organization. While these issues are of significant regulatory concern, we are also concerned by the inadequate response (and sometimes the lack of a response) by your staff to most of these issues. This indicates to us that there is a need for greater attention to: (1) what Technical Specifications (TS), NRC regulations, and Point Beach procedures require; and (2) the importance of full compliance with these safety requirements.

The violations in Section I of the Notice involve three separate occasions when licensed operators were inattentive to their duties, in addition to examples of inadequate on-shift staffing. On July 15, 1996, an NRC inspector observed on-shift control room watchstanders viewing a training videotape in the control room. Further review determined that viewing videotapes in the control room was a routine practice that had been ongoing for several years.

On July 31, 1996, an NRC inspector observed that a Unit 1 Control Operator had left his normally assigned watch station to get a cup of coffee without a required short-term watch relief. We are particularly concerned that when the Duty Shift Supervisor was questioned about these incidents, he incorrectly informed the inspectors that these activities were allowed by plant procedures.

On August 14, 1996, an NRC inspector observed the Unit 1 Control Operator fail to respond to a control board alarm until prompted by a senior reactor operator. When we discussed this observation with the Operations Manager (in the presence of the Site Manager), he indicated that he was not concerned because operators have good teamwork in the control room and an operator will occasionally miss an alarm. Finally, your staff identified that on August 14, 1996, the Duty Technical Advisor left the site while on duty, and, although capable of responding to the control room within the minimum time specified in the TS, being offsite was contrary to TS. This apparently had been an accepted practice for the past five years.

The violations in Section I of the Notice represent inattentiveness to duty on the part of licensed personnel. This does not appear to be an isolated problem at Point Beach and is a significant regulatory concern. Therefore, the violations have been classified in the aggregate in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III problem.

The violations in Section II of the Notice involve the: (1) failure to maintain adequate configuration control of the auxiliary feedwater (AFW) system following maintenance on the turbine-driven AFW pump resulting in taking the reactor critical with the pump's discharge valves closed, in violation of TS; (2) failure of the inservice testing program for the safety injection pumps to incorporate appropriate design basis acceptance criteria; and, (3) failure to require testing gages to be accurate within acceptable limits. During the 1996 Unit 1 refueling outage, the turbine-driven AFW pump governor valve stem was replaced. Testing procedures conducted following the stem replacement did not provide for restoration of the pump's discharge flow path valve lineup following the maintenance activity. Additionally, the work order associated with the stem replacement specified a cold fast start test as part of the required operability post-maintenance testing. Despite this requirement, the reactor was taken critical without the cold fast start test having been performed and with the pump discharge valves closed, which rendered the pump's flowpath inoperable.

The violations in Section II of the Notice represent a breakdown in control of licensed activities and have been classified in the aggregate in accordance with the Enforcement Policy, as a Severity Level III problem.

The violation in Section III of the Notice involves your staff failing to take prompt corrective action following the identification of a condition adverse to quality. Specifically, after completion of a calculation in April 1996, your staff concluded that the number of service water pumps required to

mitigate a design basis accident was greater than the number specified in both the Final Safety Analysis Report and TS. Your staff implemented administrative controls to increase the required number of service water pumps necessary for safe operation. However, this action was not adequate because you did not promptly request an amendment to the TS. As a result, the TS did not accurately specify the lowest functional capability or performance level of the service water system required for safe operation of your facility as required by 10 CFR 50.36. This violation represents a significant failure to meet the requirements of 10 CFR Part 50, Appendix B, Criterion XVI, and has been categorized in accordance with the Enforcement Policy, as a Severity Level III violation.

The violations in Section IV of the Notice are based on the results of an inspection performed by an Augmented Inspection Team following the hydrogen ignition event which occurred during welding on a VSC-24 spent fuel cask. Pursuant to 10 CFR 72.210, the Wisconsin Electric Power Company has been granted a general license to store spent fuel in an independent spent fuel storage installation at its Point Beach Nuclear Power Plant. The inspection of activities conducted under that general license, found that the weight of the multi-assembly sealed basket (MSB) shield lid was not appropriately translated from the safety analysis report into several procedures and there was an inadequate procedure for placing the MSB transfer cask into the spent fuel pool. In addition to these findings, it was determined that the use of Carbo Zinc 11 paint, in a borated water environment was not properly assessed by you and your vendor, Sierra Nuclear Corporation. The paint generates hydrogen in a borated water environment and adequate controls to deal with the hydrogen were not provided. Several opportunities to identify the generation of hydrogen during previous cask loading operations had been missed. Finally, a safety evaluation was not performed for improperly sized rigging utilized for lowering the MSB into the ventilated concrete cask, and a safety evaluation for weighing the MSB shield lid while in place was not adequate. These violations of the requirements of 10 CFR Part 72 represent a breakdown in control of licensed activities associated with dry cask storage activities and have been classified in the aggregate in accordance with the Enforcement Policy, as a Severity Level III problem.

During the enforcement conference, your staff identified a number of root causes for these violations including weaknesses in: (1) questioning attitudes, (2) management expectations, (3) resolution of issues, (4) attention to detail, (5) communications, and (6) organizational design. Numerous corrective actions were described to address these root causes.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 for power reactors was considered for each Severity Level III violation or problem in Sections I, II, and III of the Notice. A base civil penalty in the amount of \$12,500 for independent spent fuel installations was considered for the problem in Section IV of the Notice. Because your facility

has been the subject of escalated enforcement actions within the last 2 years¹, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy.

Credit was not warranted for identification because the NRC identified the Severity Level III problems in Sections I, II, and IV of the Notice and the Severity Level III violation in Section III of the Notice.

After consideration of the factor of corrective action, NRC has determined that credit was not warranted for the violations associated with licensed operator inattentiveness noted in Section I of the Notice because of your failure to recognize the unacceptability of the NRC identified operator performance issues and the resulting failure to properly initiate corrective actions. As to the violations in Section II of the Notice, although you presented a number of corrective actions in LER No. 96-002, in response to the April 1996 AFW configuration control event, we note that following testing in August 1996, the Unit 2 service water valve SW-104 was found out-of-position by the NRC, indicating your corrective actions in response to configuration control inadequacies were not comprehensive. Finally, your staff's corrective actions for the inservice testing and post-maintenance testing violations were not prompt because they were only initiated just prior to the enforcement conference, despite these issues having been identified by the NRC at least a month earlier. In addition, credit is not warranted for your corrective actions taken in response to the violation described in Section III of the Notice, involving your staff's failure to take prompt corrective action to request an amendment to your TS. At the time of the pre-decisional enforcement conference, your staff had not requested an amendment to assure that the required number of service water pumps for safe operation of the facility were accurately listed in the TS, and an amendment was not requested until September 30, 1996. Accordingly, the NRC has determined that credit is not warranted for the factor of corrective action for the Severity Level III problems in Sections I and II, and the Severity Level III violation in Section III of the Notice. Therefore, after consideration of the factors of identification and corrective action, a civil penalty of \$100,000 is being assessed for each of the Severity Level III problems and violations in Sections I, II, and III of the Notice.

As to the violation described in Section IV of the Notice, NRC considered your corrective action prompt and comprehensive. With no credit warranted for the factor of identification, as described above, normal application of the Enforcement Policy would result in a base civil penalty of \$12,500 being assessed for the violations associated with the VSC-24 spent fuel cask. However, because of the need to stress the importance of (1) properly conducting spent fuel cask loading operations; (2) being attentive to the indications of hydrogen generation that would have alerted your staff to the

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¹ A Severity Level III violation (identified in July 1995) was issued on October 11, 1995 (EA 95-158).

December 3, 1996

need for adequate controls during welding operations; and (3) ensuring that cask design details, such as paint, are thoroughly evaluated for interactions with materials in the plant environment by cask vendors and plant engineering, I have been authorized to exercise enforcement discretion and double the proposed base civil penalty. The penalty for the violation associated with the VSC-24 spent fuel cask is \$25,000.

Therefore, to emphasize the need for full compliance with NRC regulatory requirements, I have been authorized, after consultation with the Director, Office of Enforcement to issue the enclosed Notice in the total amount of \$325,000 for the Severity Level III violation and problems described in the Notice.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

A. Bill Beach
Regional Administrator

Docket Nos. 50-266; 50-301; 72-005
License Nos. DPR-24; DPR-27

Enclosure: Notice of Violation and Proposed
Imposition of Civil Penalties

cc w/encl: S. A. Patulski, Site General Manager
A. J. Cayia, Plant Manager
Virgil Kanable, Chief Boiler Section
Cheryl L. Parrino, Chairman,
Wisconsin Public Service Commission
State Liaison Officer
Sierra Nuclear Corporation

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Wisconsin Electric Power Company
Point Beach Nuclear Plant
Units 1 and 2

Docket Nos. 50-266; 50-301; 72-005
License Nos. DPR-24; DPR-27
EA 96-273

During NRC inspections conducted on June 12 through August 23, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the NRC proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

I. Violations Associated with Licensed Operator Inattentiveness and On-Duty Shift Staffing

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

Point Beach Nuclear Plant Operations Manual (OM) Section 3.1, "Main Control Room Conduct and Access," Revision 3, dated November 7, 1994, Step 7.1.3 states, in part, that potentially distracting activities are strictly forbidden. Step 7.1.7.d requires that a watch relief must occur prior to the Control Operator leaving the surveillance areas. Step 7.1.8 states that the short-term watch relief is required to maintain a physical position in the normal area for the Control Operator. Section 7.0, requires, in part, that individuals on-watch in the control room are expected to behave according to the highest standards of conduct. After assuming the duties and responsibilities of the watchstation, the operator is expected to be attentive to assigned duties, instrumentation, controls, computer monitors, and alarms, and operator response to alarms should be timely.

OM 2.5, "Licensed Operators," Revision 0, dated June 10, 1993, Section 2.0, requires, in part, that the reactor operator has principle responsibility for the operations of his assigned unit and is responsible to remain alert to and knowledgeable of all plant conditions in progress that involve the functioning of equipment under his control.

Technical Specification (TS) 15.6.2.2.a.6 states that the Duty Technical Advisor is located on-site on ten minute call to the control room.

- A. Contrary to the above, on July 15, 1996, on-shift watchstanders (licensed reactor operators and senior reactor operators) were viewing a training videotape in the control room, a potentially distracting activity. (01013)

- B. Contrary to the above, on July 31, 1996, the Unit 1 Control Operator (licensed reactor operator) left the surveillance areas without a short-term watch relief maintaining a physical position in the normal area for the Control Operator. (01023)
- C. Contrary to the above, on August 14, 1996, the Unit 1 Control Operator (licensed reactor operator) was not attentive to his assigned duties; was not alert to and knowledgeable of plant status; and was not timely in responding to an expected alarm, in that a main control board panel (C01) annunciator alarm was present for 15 seconds with no response from the operator. (01033)
- D. Contrary to the above, on August 14, 1996, the on-shift Duty Technical Advisor went off-site while on duty. (01043)

This is a Severity Level III problem (Supplement I)
Civil Penalty - \$100,000.

II. Violations Associated with the Auxiliary Feedwater and Safety Injection Systems

- A. TS 15.3.4.A.2.a requires for two-unit operation when the reactor is heated above 350°F, that the reactor not be taken critical unless all four auxiliary feedwater pumps together with their associated flow paths and essential instrumentation are operable.

Contrary to the above, at 6:20 p.m. on April 22, 1996, during two-unit operation when the reactor was heated above 350°F, Unit 1 was made critical with the Turbine Driven Auxiliary Feedwater Pump 1P-29 rendered inoperable in that the pump's discharge isolation valves, 1AF-4000 and 1AF-4001, were shut. (02013)

- B. 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," requires that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures or drawings.
  - 1. Point Beach Nuclear Plant Operations Checklist CL-1D, "Heatup," Revision 9, dated November 20, 1995, Step 4.23, states, in part, that all four auxiliary feedwater pumps together with their associated flow paths and essential instrumentation are operable for two-unit operation prior to proceeding with the plant heatup. Operations Checklist CL-1A, "Criticality Checklist," Revision 35, dated November 27, 1995, Step 9.2, states, in part, that all four auxiliary feed pumps, together with their associated flow paths and essential instrumentation, shall be operable for one-unit to be critical and the second unit being made critical.

Contrary to the above, during the period including April 15, 1996, through April 22, 1996, operations personnel improperly initialed Step 4.23 of CL-1D and Step 9.2 of CL-1A, indicating that the auxiliary feedwater system was operable when the Unit 1 turbine driven auxiliary feedwater pump and the pump's flow path was inoperable due to the pump's discharge isolation valves 1AF-4000 and 1AF-4001, being shut. (02023)

2. Contrary to 10 CFR Part 50, Appendix B, Criterion V, Point Beach Nuclear Plant Work Order 9600818, issued on April 7, 1996, for the replacement of the Unit 1 turbine driven auxiliary feedwater pump governor valve stem, was inadequate, in that it did not specify steps to restore the pump discharge flowpath to its normal and operable configuration. As a result, the pump's flow path was rendered inoperable. (02033)
  3. Contrary to 10 CFR Part 50, Appendix B, Criterion V, Point Beach Nuclear Plant Procedure IT-290B, "Overspeed Test Turbine Driven Auxiliary Feedwater Pump, Refueling Interval Unit 1," Revision 4, dated April 8, 1996, was inadequate, in that it did not specify adequate testing to demonstrate that the pump's flow path was operable following the reconnection of the pump and turbine. (02043)
  4. Contrary to 10 CFR Part 50, Appendix B, Criterion V, prior to making Unit 1 critical on April 22, 1996, the licensee failed to perform the Point Beach Nuclear Plant Work Order 9600818 specified post maintenance operability test, Procedure IT-08A, "Cold Start Testing of Turbine-Driven Auxiliary Feed Pump and Valve Test Unit 1 (Quarterly)." (02053)
- C. 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," requires that a test program be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents.

Contrary to the above, from March 28, 1994, through June 13, 1996, the licensee's inservice test program for the safety injection pumps did not incorporate the requirements and acceptance limits contained in applicable design documents. Specifically, the licensee's test program did not incorporate the correct acceptance criterion of 1375 psig at 400 gpm which is derived from the reduced performance pump curve in Figure 6.2-4 of the Final Safety Analysis Report. (02063)

- D. 10 CFR Part 50, Appendix B, Criterion XII, "Control of Measuring and Test Equipment," requires that measures be established to assure that gages, instruments, and other measuring and testing devices used in activities affecting quality are properly controlled, calibrated, and adjusted at specified periods to maintain accuracy within necessary limits.

Contrary to the above, from December 1992 until July 1996, the four Ashcroft safety injection pump discharge pressure gages used for determining the acceptability of quarterly inservice testing, an activity affecting quality, were not properly controlled, calibrated, and adjusted at a sufficient frequency to maintain accuracy within necessary limits. Specifically, during the period, the gages were found within their required accuracy only once in twenty calibrations. (02073)

This is a Severity Level III problem (Supplement I).
Civil Penalty - \$100,000.

III. Violation Associated with the Service Water System

TS 15.3.3.D requires that neither reactor be made or maintained critical unless four service water pumps are operable, two from each train. The basis for TS 15.3.3.D states, in part, that a total of six pumps are installed, only two of which are required to operate during the injection and recirculation phases of a postulated loss-of-coolant accident.

10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures shall be established to assure that conditions adverse to quality, such as deficiencies, deviations, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

Contrary to the above, on April 2, 1996, the licensee concluded in Calculation 96-0074 that a total of two operating service water pumps were not adequate to maintain required flows and pressures, and that a total of three pumps were required to maintain desired flows and pressures throughout the service water system during the injection phase of a LOCA response. This conclusion that three pumps were required rather than the two pumps specified in the TS basis, constituted a condition adverse to quality. As a result, TS 15.3.3.D did not accurately specify the lowest function capability or performance level of the service water system required for safe operation of the facility. As of August 23, 1996, the licensee failed to take prompt action to correct this condition adverse to quality by failing to request an amendment to assure that the TS accurately reflected the minimum number of service water pumps necessary for the safe operation of the

facility. During the period from April 2, 1996, through August 23, 1996, the licensee operated the station with one or both of the reactors critical. (03013)

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

IV. Violations Associated With Dry Cask Storage Activities

- A. 10 CFR 72.212(b)(7) requires the licensee to comply with the terms and conditions of the Certificate of Compliance for each cask model used for storage of spent fuel.

Certificate of Compliance 1007, Attachment A, Section 1.1.3, requires that activities at the independent spent fuel storage installation (ISFSI) be conducted in accordance with the requirements of 10 CFR Part 50, Appendix B.

10 CFR Part 50, Appendix B, Criterion III, requires, in part, that measures be established to assure that applicable regulatory requirements and the design basis, as specified in the license application, for those structures, systems, and components to which this appendix applies, are correctly translated into procedures. Measures shall also be established for selection and review for suitability of application of materials, parts, equipment, and processes that are essential to the safety-related functions of structures, systems, and components.

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

10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to the appropriate levels of management.

1. Contrary to the above, as of May 28, 1996, with regard to Point Beach ISFSI activities, measures were not established to assure that the design basis was correctly translated into procedures. Specifically, the following procedures listed a weight of 4,429 pounds for the multi-assembly sealed basked (MSB) shield lid while the VSC-24 spent fuel

cask Safety Analysis Report, Table 3.2-1 listed 6,350 pounds:

- RP-7, Part 1, "Move the Ventilated Concrete Cask (VCC) into the Auxiliary Building," Table 1, Revision 5, dated April 29, 1996
  - RP-7, Part 2, "Load the Multi-Assembly Sealed Basket (MSB) into the MSB Transfer Cask (MTC)," Table 1, Revision 5, dated April 29, 1996
  - RP-7, Part 5, "Remove the Multi-Assembly Sealed Basket (MSB) and MSB Transfer Cask (MTC) from the Spent Fuel Pool (SFP)," Table 1, Revision 5, dated May 16, 1996
  - RP-8, Part 4, "Placing the MSB Transfer Cask (MTC) into the Spent Fuel Pool," Table 1, Revision 1, dated December 8, 1995 (04013)
2. Contrary to the above, as of May 27, 1996, with regard to the Point Beach ISFSI activities, Procedure RP-8, Part 4, "Placing the MSB Transfer Cask (MTC) into the Spent Fuel Pool," Table 1, Revision 1, dated December 8, 1995, was inadequate in that:
- a. Step 4.3, required verification that the ambient temperature in the general area surrounding the MTC to be greater than 45°F, but did not specify the method of measuring temperature. As a result, a thermometer near a space heater was used to measure temperature and this was inadequate because measured temperature did not reflect the ambient temperature in the general area surrounding the MTC; and
  - b. no guidance was provided to remove the shield lid from the spent fuel pool. This guidance was required to complete the cask unloading operations. As a result, the shield lid was allowed to be suspended above the spent fuel pool for an indefinite time presenting a potential hazard if dropped over spent fuel assemblies. (04023)
3. Contrary to the above, as of May 28, 1996, with regard to Point Beach ISFSI activities, the licensee had selected Carbo Zinc 11 to coat the interior of the multi-assembly sealed basket without appropriately establishing the suitability of application for use in dry cask storage activities. Specifically, Carbo Zinc 11 is not intended for immersion in acidic solutions, such as the spent fuel pool,

and there was the potential for zinc borate to precipitate in the spent fuel pool water. (04033)

4. Contrary to the above, on May 22, 1996, with regard to Point Beach ISFSI activities, during the loading of a cask, a small, unexpected blue flame was observed while welders were grinding a portion of the shield lid root weld. The identification of this significant condition adverse to quality, the cause of the condition, and the corrective action taken was not documented and reported to the appropriate levels of management. (04043)
5. Contrary to the above, on May 22, 1996, with regard to Point Beach ISFSI activities, during the loading of a cask, unexpected water seepage from the cask drain line onto the top of the shield lid was observed. This was a condition adverse to quality because the presence of water was an indicator of pressure within the cask that was being caused by hydrogen being produced. The identification of this significant condition adverse to quality, the cause of the condition, and the corrective action taken was not documented and reported to the appropriate levels of management. (04053)

- B. 10 CFR 72.48(a), states, in part, that a licensee may make changes to the ISFSI described in the Safety Analysis Report or in the procedures described in the Safety Analysis Report if the changes do not constitute an unreviewed safety question or a significant increase in occupational exposure.

10 CFR 72.48 (b)(1) requires, in part, that the licensee maintain records of changes in the ISFSI, and changes in procedures made pursuant to this section if these changes constitute changes in the ISFSI or procedures described in the Safety Analysis Report. These records must include a written safety evaluation that provides the bases for the determination that the change does not involve an unreviewed safety question.

VSC-24 spent fuel cask Safety Analysis Report (SAR) describes, in part, that the purpose of the cover plate is to prevent inadvertent lifting of the MSB out of the MTC to ensure undue radiation exposure to nearby workers. The SAR further describes that the cover plate must have sufficient strength to support the MTC (since an inadvertent MSB lift would imply lifting the entire MTC).

1. Contrary to the above, as of May 28, 1996, the licensee did not perform a safety evaluation to determine if an unreviewed safety question existed prior to a lifting evolution which created the potential for dropping the

MSB/MTC assembly off of the VCC, an accident not described in the SAR. (04063)

2. Contrary to 10 CFR 72.48 (b)(1), on May 29, 1996, Safety Evaluation Report (SER) 96-045 for weighing the MSB shield lid while in place did not provide adequate bases for the determination that the change did not involve an unreviewed safety question. Specifically, SER 96-045 did not address inadvertently removing the lid from the MSB during weighing operations which would result in a significant increase in occupational exposure. (04073)

This is a Severity Level III problem (Supplement VI).
Civil Penalty - \$25,000.

Pursuant to the provisions of 10 CFR 2.201, Wisconsin Electric Power Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalties (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved.

If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalties proposed above, or may protest imposition of the civil penalties in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil

penalties in whole or in part, such answer may request remission or mitigation of the penalties.

In requesting mitigation of the proposed penalties, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing civil penalties.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Lisle, Illinois
this 3rd day of December 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

July 1, 1996

EA 96-124

Neil S. Carns, President and
Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, Kansas 66839

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES -
\$300,000
(NRC Inspection Report Nos. 50-482/96-05 and 50-482/96-03)

Dear Mr. Carns:

This refers to the predecisional enforcement conference held in the NRC's Arlington, Texas office on May 10, 1996. The purpose of the conference was to discuss apparent violations related to a frazil ice situation that occurred at the Wolf Creek Generating Station on January 30-31, 1996. Wolf Creek personnel first reported the event to the NRC on January 30, 1996, in accordance with 10 CFR 50.72.

An NRC Augmented Inspection Team (AIT) examined the facts surrounding the event during the period of February 6-15, 1996, and the results of the inspection were documented in NRC Inspection Report 50-482/96-05, issued on March 7, 1996. The scope of the AIT was fact-finding and did not include the identification of any potential violations of regulatory requirements. A subsequent special inspection was conducted on March 18-25, 1996, to determine whether activities were conducted safely and in accordance with NRC requirements, and ten apparent violations were identified. The results of this special inspection were discussed with members of your staff during an exit briefing on April 5, 1996, and were documented in NRC Inspection Report 50-482/96-03, issued on April 24, 1996.

As described in the April 24, 1996 inspection report, the apparent violations stemmed from the NRC's review of the event that involved icing on the circulation water system/service water system traveling screens and trash racks which resulted in the decision to manually trip the reactor, and the subsequent event recovery actions. The NRC's AIT noted the event was safety significant in that ice formation on the essential service water (ESW) system trash racks resulted in the loss of one train (Train A) of the ultimate heat sink and jeopardized the other (Train B). This event also showed significant weaknesses in engineering, operations, and maintenance.

The NRC has determined that the circumstances surrounding the event are of very significant regulatory concern because: (1) the event was safety-significant; (2) the event was preventable; (3) although ultimately, Wolf Creek personnel took positive actions to terminate the event, the plant

operations staff made errors in the early stages which actually complicated, rather than mitigated, the event; and (4) preventable problems with the packing on the turbine-driven auxiliary feedwater (TDAFW) pump, a safety-related pump, distracted plant personnel from focusing on a response to the problems with the ESW system. Based on the information obtained during the NRC inspections, and the information provided during the predecisional enforcement conference, the NRC has determined that violations of regulatory requirements occurred. These violations are listed in the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice). The more significant violations are grouped into three issues and are described below.

The first issue (Violation I.A in the enclosed Notice) is a violation involving a failure to assure that inadequate ESW system warming line flow, a condition adverse to quality, was promptly identified and corrected. This failure, which directly contributed to the January 30-31, 1996 frazil icing event, involved at least four opportunities to have assessed the design basis of the system and to have identified and corrected the inadequate warming line flow. Although not reviewed during the inspections associated with the January 30, 1996, event and not cited in the Notice, Generic Letter 89-13, "Service Water System Problems Affecting Safety Related Equipment," was another possible opportunity for the identification of the deficiency in the ESW warming lines. The failure to assure adequate warming line flow and the missed opportunities to identify and correct the problem is of significant regulatory concern. Therefore, this violation is categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III violation.

The second issue (Violation I.B in the Notice) is a violation involving a failure to follow plant procedures while aligning the ESW system. The operator who performed the initial alignment did so without a procedure and had concerns about the accuracy of his actions and an excessive period of time elapsed (about 6 hours) before ESW valve misalignments were corrected. This failure resulted in valve misalignments that contributed to, and hastened, the failure of ESW Train A and the degradation of ESW Train B, further complicating the event. This failure is also of significant regulatory concern. Therefore, this violation is categorized in accordance with the Enforcement Policy as a Severity Level III violation.

The third issue (Violations I.C.1 and I.C.2 in the Notice) involves two separate violations involving (1) a failure to include all work instructions for installing packing on the TDAFW pump; and (2) inadequate corrective action for a problem with the TDAFW pump. The first violation contributed to the packing failure of the TDAFW on January 30, 1996, while the second violation represents a missed opportunity to have identified and adequately corrected the packing installation problem. It is questionable whether the TDAFW pump would have been able to perform its intended safety function if it had been called upon to function. Given the safety significance of the TDAFW pump and the distractions the leaking pump caused during the frazil ice event, these violations are of significant regulatory concern and warrant being classified in the aggregate as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is normally considered for each Severity Level III violation or problem. However, each of these violations (Violations I.A, I.B, and I.C) reflect significant weaknesses in engineering, operations, and maintenance that contributed to the frazil ice event and complicated the recovery from a risk-significant event that was entirely preventable. These violations reflect particularly poor performance characterized by missed opportunities to identify and correct significant design problems, inappropriate operator actions that severely challenged event mitigation, and TDAFW pump maintenance and corrective action deficiencies that resulted in distractions in recovery from the event. In view of this particularly poor performance that substantially contributed to, and severely complicated the recovery from this risk-significant event, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, to exercise discretion pursuant to Section VII A.1 of the Enforcement Policy and to propose a civil penalty in the amount of \$100,000 for each of the two Severity Level III violations and the Severity Level III problem. Accordingly, to emphasize the significance of the problems these violations represent, to encourage improvement in performance, and to emphasize the need for lasting comprehensive corrective actions, I have issued the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice) in the total amount of \$300,000.

Five additional violations are cited in the attached Notice for which no civil penalties are assessed. The first involves a failure to assure that the ESW system design bases were appropriately translated into specifications and drawings in that design errors were made which caused the ESW system not to be protected against freezing. Specifically, incorrect assumptions regarding warming line temperature and flow rates resulted in significant degradation in the freeze protection capability provided by the warming lines. The errors had existed since original startup of the plant. This violation is significant because the failure to design the ESW system properly was a principal contributor to the icing event. Therefore, this violation has been categorized in accordance with the Enforcement Policy at Severity Level III. In accordance with the Enforcement Policy, a civil penalty is normally considered for a Severity Level III violation. However, in this case no civil penalty is proposed for this violation because the violation occurred beyond the 5-year statute of limitations for imposing civil penalties.

The four remaining violations, categorized at Severity Level IV, involve failures to: (1) ensure that copies of station procedures were available in the control room, (2) comply with a technical specification limiting condition for operation when the plant did not achieve hot shutdown in the required 6-hour timeframe, (3) determine whether less than full thread engagement for the TDAFW pump inboard packing gland follower nuts was acceptable, and (4) follow maintenance work instructions contributing to TDAFW pump packing loss.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

L. J. Callahan
Regional Administrator

Docket No. 50-482
License No. NPF-42

Enclosure: Notice of Violation and
Proposed Imposition of Civil Penalties

cc w/enclosure:
Vice President Plant Operations
Wolf Creek Nuclear Operating Corp.
P.O. Box 411
Burlington, Kansas 66839

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Operating Corporation

- 5 -

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Public Health Physicist
Division of Environment
Kansas Department of Health
and Environment
Bureau of Air & Radiation
Forbes Field Building 283
Topeka, Kansas 66620

Mr. Frank Moussa
Division of Emergency Preparedness
2800 SW Topeka Blvd
Topeka, Kansas 66611-1287

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Wolf Creek Nuclear Operating Corporation
Wolf Creek Generating Station

Docket No. 50-482
License No. NPF-42
EA 96-124

During an NRC inspection conducted on March 18-25, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

I. Violations Assessed a Civil Penalty

- A. Appendix B, Criterion XVI, states that measures shall be established to assure that conditions adverse to quality, such as failures and malfunctions, are promptly identified and corrected.

Contrary to the above, as of January 30, 1996, the condition of inadequate essential service water system warming line flow (a condition adverse to quality) was not promptly identified and corrected. There were several opportunities to have identified and corrected the design bases of the system specifically related to warming line flow: (1) during an evaluation performed in 1993 related to a warming line valve only capable of being 50 percent open; (2) while evaluating whether a frazil icing event at another plant in 1993 could occur at Wolf Creek; (3) while answering an internal question in 1991 directly related to a concern for frazil icing; and (4) while reviewing a 1978 NRC Circular related to icing conditions (frazil ice was specifically considered by the licensee's architect-engineer). (01013)

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

- B. Technical Specifications Section 6.8.1 states that written procedures shall be established, implemented, and maintained covering the activities recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A of Regulatory Guide 1.33, Revision 2, specifies procedures for abnormal, offnormal, or alarm conditions.

The licensee's alarm response Procedure ALR 00-008B, "SERV WTR PRESS HI LO," Revision 8, directs the operator to establish operation of the essential service water system (ESW) using Procedure SYS EF-200, "Operation of the ESW System." Procedure SYS EF-200 requires that ESW Valves EF HV-37 and -38 be opened, and EF HV-39, -40, -41, and -42 be closed.

Contrary to the above, on January 30, 1996, a control room operator, while aligning the ESW system as directed by alarm response Procedure ALR 00-008B, failed to use system Procedure SYS EF-200, and consequently the control room operator closed Valves EF HV-37 and -38 (to throttled positions), and opened Valves EF HV-39, -40, -41, and -42 which was not in accordance with Procedure SYS EF-200. (02013)

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

- C. 1. 10 CFR Part 50, Appendix B, Criterion V, states that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances.

Contrary to the above, on January 25 and 30, 1996, work instructions provided for packing the turbine-driven auxiliary feedwater (TDAFW) pump (an activity affecting quality) for WP 108952, Task 6, and WP 109087, Task 2, were not appropriate to the circumstances in that not all pertinent packing information in Component Change Package 05767, which was contained in the TDAFW pump vendor manual, was included. Specifically, neither WP 108952, Task 6, or WP 109087, Task 2, provided adequate instructions concerning: (1) the proper tightening of the packing gland follower nuts, (2) guidance on proper installation of the packing gland follower into the pump stuffing box, and (3) directions on the pump's post maintenance run time required to obtain proper packing leakoff. (03013)

2. 10 CFR Part 50, Appendix B, Criterion XVI, specifies that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, or deviations are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude recurrence.

Contrary to the above, as of January 30, 1996, a significant condition adverse to quality - improper adjustment of packing on the safety-related TDAFW pump - was identified, but actions were not taken to determine and correct the cause of the deficient condition. Specifically, Performance Improvement Request (PIR) 94-1918 was issued on October 30, 1994 to address the improper adjustment of packing on the

TDAFW pump. However, the PIR was closed on the basis of repacking the pump without determining and correcting the cause of the packing installation problem. (03023)

This is a Severity Level III problem (Supplement I).
Civil Penalty - \$100,000.

II. Violations Not Assessed A Civil Penalty

- A. 10 CFR Part 50, Appendix B, Criterion III, states that measures shall be established to assure that applicable regulatory requirements and design bases for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions.

Contrary to the above, as of January 30, 1996, design measures failed to assure that the essential service water system design bases (protection against natural phenomena) were appropriately translated into specifications and drawings in that design errors were made which caused the essential service water system not to be freeze protected. Specifically, incorrect assumptions regarding warming line temperature and flow rates (35°F and full pipe flow) resulted in significant degradation in the freeze protection capability provided by the warming lines. (04013)

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

- B. Technical Specification section 6.8.1 states that written procedures shall be established, implemented, and maintained covering the activities recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A of Regulatory Guide 1.33, Revision 2, specifies procedures for abnormal, offnormal, or alarm conditions.

Operations Procedure ADM 02-014, "Control of Operations Documents, Revision 5, Section 6.9.3 states that, "Procedures will be filed in the appropriate Procedure File Drawers, Procedural Manuals or field areas as applicable."

Contrary to the above, on January 30 and March 22, 1996, control room procedures were not filed in the appropriate location. Specifically:

1. On January 30, 1996, when needed during the transition from Emergency Procedure EMG E-0, "Response to Reactor Trip or Safety Injection," to Emergency Procedure EMG ES-02, "Reactor Trip Response," EMG ES-02 was determined not to be filed in any of the four emergency operating procedure sets in the control room as required.

2. On March 22, 1996, an NRC inspector determined that alarm response procedure ALR 00-11D, "SL41 Bus Trouble," was not located in the control room after it had been identified as missing during an earlier licensee audit of procedures. (05014)

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

- C. Technical Specification Limiting Condition for Operation Action Statement 3.7.2.b specifies that in Modes 1, 2, and 3, "With two auxiliary feedwater pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours."

Contrary to the above, on January 30, 1996, when in Mode 3 (Hot Standby) and with two auxiliary feedwater pumps inoperable, hot shutdown was not achieved as specified in Technical Specification Action Statement 3.7.2.b. The second auxiliary feedwater pump (A Train) became inoperable at 7:47 a.m. on January 30, 1996. Hot shutdown, which should have been achieved by 1:47 p.m., was not achieved until 3:31 p.m. on January 30, 1996. (06014)

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

- D. 10 CFR Part 50, Appendix B, Criterion XVI, specifies that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, or deviations are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude recurrence.

Contrary to the above, as of January 30, 1996, a significant condition adverse to quality was identified, but actions were not taken to correct the deficiency or to determine the cause of the condition. Specifically, Work Request 60242-94 was issued on October 20, 1994, to correct the TDAFW pump inboard packing gland follower nuts which had insufficient thread engagement; however, the Work Request was closed without further action on the basis that a non-conformance report did not specify full thread engagement was acceptable. (07014)

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

- E. Technical Specification Section 6.8.1 states that written procedures shall be established, implemented, and maintained covering the activities recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A of Regulatory Guide 1.33, Revision 2, specifies that maintenance that can affect the performance of safety related equipment should be properly preplanned and performed in accordance with written procedures.

Maintenance Procedure 16C-002, "Work Controls," Revision 2, Step 6.6.7.5 states, "Perform work in accordance with work instructions and referenced documents," Task 2, step 5.4 of work order WP 108952 specified that the packing gland follower nuts be tightened "snug."

Contrary to the above, on January 25, 1996, maintenance personnel failed to follow established procedures in the implementation of work on the TDAFW pump. Specifically, maintenance personnel tightened the nuts only "finger tight," instead of "snug." (08014)

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

Pursuant to the provisions of 10 CFR 2.201, Wolf Creek Nuclear Operating Corporation (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalties (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalties in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties.

In requesting mitigation of the proposed penalties, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalties.

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

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: Mr. James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, ATTN: Enforcement Officer, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Arlington, Texas,
this 1st day of July 1996

B. SEVERITY LEVEL I, II, ~~III~~ VIOLATIONS,
NO CIVIL PENALTY

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

October 21, 1996

EA 96-271

E. Thomas Boulette, PhD
Senior Vice President - Nuclear
Boston Edison Company
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, Massachusetts 02360-5599

SUBJECT: NOTICE OF VIOLATION
(NRC INSPECTION REPORT NO. 50-293/96-07)

Dear Mr. Boulette:

This letter refers to the NRC inspection conducted from July 8 to July 12, 1996, and July 22 to July 26, 1996, at the Pilgrim Nuclear Power Station facility to review the circumstances surrounding an event reported to the NRC in Licensee Event Report (LER) 96-04, dated May 9, 1996, involving the potential degradation of primary containment integrity. The findings of the inspection were discussed with you and members of your staff during a telephone exit meeting on September 3, 1996. In addition, the NRC inspection report was sent to you with our letter, dated September 20, 1996. On October 3, 1996, a Predecisional Enforcement Conference was conducted with you and members of your staff to discuss the related violations, their causes, and your corrective actions.

Based on the information developed during the inspection, and the information provided during the conference, and by the LER, two violations of NRC requirements were identified. The violations are set forth in the enclosed Notice of Violation. The first violation involved the failure to maintain primary containment integrity in accordance with Technical Specification Section 3.7.A, in that two electrical containment penetrations were not properly protected due to improper trip-settings of 12 electrical penetration circuit breakers. Under certain high-impedance fault conditions during a postulated design basis accident, the trip settings, which were too high, could allow excessive current to pass through the electrical penetration circuits, thereby damaging the penetration seals, and causing the loss of primary containment integrity. This condition was discovered by your staff on April 9, 1996, following an investigation of a failed drywell-unit-cooler fan motor that was powered by electrical circuits passing through one of the two penetrations. When you discovered this condition, you declared primary containment inoperable and entered a 24-hour limiting condition for operation (LCO).

The second violation involved the failure to identify and correct this condition sooner, even though it existed as early as 1988 (and may have existed as far back as 1972). This constitutes a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action" which requires, in part, that measures shall be established to assure conditions adverse to

quality are promptly identified and corrected. For example, during a self-assessment that you performed in July 1991 of Pilgrim's electrical distribution system, your staff identified that electrical penetration protection for potential electrical faults within the primary containment had not been addressed. Although your staff later performed an operability evaluation to address this problem, the problem was not corrected because of an incorrect assumption regarding thermal overload of the motor starter, as described in the Notice. Therefore, the incorrect breaker trip-setting problem was not corrected. Later, in 1992, while performing a calculation for the purpose of evaluating the penetration under normal plant operation, your engineers noted that some of the circuits protected from overload by thermal relays were not adequately protected from short-circuits because the settings of magnetic-trip-only breakers exceeded National Electric Code (NEC) limits. Your engineers failed to pursue this further, and did not recognize that the circuit breaker manufacturer's technical manual required adherence to the NEC limits. In July 1993, your staff mischaracterized the corrective action for replacing the magnetic-trip-only breakers as enhancements, and therefore, the affected circuit breakers were not replaced until 1996.

The failure to maintain containment integrity under certain conditions, as well as the failure to identify this condition sooner, represent significant regulatory concerns. Therefore, these violations have been classified in the aggregate as a Severity Level III problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," (Enforcement Policy), NUREG-1600.

The NRC commends the technical inquisitiveness of the electrical engineer who identified this problem in 1996 during his follow-up review of a starter problem with a drywell area cooler. If not for his inquisitiveness, this problem likely would have remained uncorrected. Nonetheless, if similar inquisitiveness had been exhibited by your staff when opportunities existed in 1991, 1992, and 1993, this problem could have been corrected sooner. These findings demonstrate the need for management taking appropriate action to assure that your staff in general, and your engineers in particular, are sensitive to the importance of performing comprehensive evaluations whenever potential problems surface at the facility. Such reviews are needed to assure that all potentially degraded features are promptly identified and corrected.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III problem. Your facility has been the subject of escalated enforcement actions within the last 2 years (namely, a Severity Level III violation without a civil penalty issued on March 3, 1995, for failure to maintain containment integrity for approximately 30 days while the reactor was critical (EA 95-010)). Therefore, the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit is warranted for identification since you identified the violation of Technical Specification Section 3.7.A. Credit is warranted for corrective action because your corrective actions were both prompt and comprehensive once the violations were identified in 1996. Your corrective actions included, but were not limited to (1) immediately entering the Technical Specification Limiting Condition of Operation; (2) correcting the trip-setting of the

affected circuit breakers within four hours; (3) replacing all 12 magnetic-trip-only circuit breakers with thermal-magnetic type circuit breakers; and (4) completing a root cause evaluation, which identified additional corrective actions to be taken in the near future, namely establishing an improved tracking mechanism for periodic Long Term Plan (LTP) review, revising the calculation procedure to require verification that corrective actions are tracked, reviewing other calculations to determine if similar conditions exist, and reviewing the electrical engineering design guide to determine whether improvements should be made.

Therefore, to encourage prompt and comprehensive identification and correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

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

Sincerely,

A handwritten signature in dark ink, appearing to read 'Hubert J. Miller', is written over the typed name.

Hubert J. Miller
Regional Administrator

Docket No. 50-293

License No. DPR-35

Enclosure: Notice of Violation

cc w/encl:

L. Olivier, Vice President - Nuclear and Station Director
T. Sullivan, Plant Department Manager
N. Desmond, Regulatory Relations
D. Tarantino, Nuclear Information Manager
R. Hallisey, Department of Public Health, Commonwealth of Massachusetts
The Honorable Therese Murray
The Honorable Linda Teagan
B. Abbanat, Department of Public Utilities
Chairman, Plymouth Board of Selectmen
Chairman, Duxbury Board of Selectmen
Chairman, Nuclear Matters Committee
Plymouth Civil Defense Director
P. Gromer, Massachusetts Secretary of Energy Resources
J. Shaer, Legislative Assistant
J. Fleming
A. Noguee, MASSPIRG
Regional Administrator, FEMA
Office of the Commissioner, Massachusetts Department of Environmental Quality
Engineering
Office of the Attorney General, Commonwealth of Massachusetts
T. Rapone, Massachusetts Executive Office of Public Safety
Chairman, Citizens Urging Responsible Energy
Commonwealth of Massachusetts, SLO Designee

ENCLOSURE

NOTICE OF VIOLATION

Boston Edison Company
Pilgrim Nuclear Power Station

Docket No. 50-293
License No. DPR-35
EA 96-271

During an NRC inspection conducted July 8-12, 1996 and July 22-26, 1996, for which a telephonic exit meeting was held on September 3, 1996, two violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG 1600, the violations are listed below:

- A. Technical Specification Section 3.7.A., "Primary Containment Integrity," requires, in part, that the primary containment integrity shall be maintained at all times when the reactor is critical.

Contrary to the above, for an indeterminate but extended period prior to April 9, 1996, primary containment integrity was not maintained in that two electrical containment penetrations (Nos. Q105A and Q105B) were not properly protected due to improper trip-settings on the circuit breakers for the two affected electrical-penetrations. Specifically, under certain high-impedance electrical fault conditions during a postulated design basis accident, the trip settings for the circuit breaker, which were set too high, could allow excessive current to pass through the electrical penetration circuits, damaging the penetration seals, and causing the primary containment to lose its integrity. (IFS 01013)

- B. 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures shall be established to assure conditions adverse to quality such as deficiencies, deviations, and nonconformances are promptly identified and corrected.

Contrary to the above, prior to April 9, 1996, measures were not established to assure that conditions adverse to quality were promptly identified and corrected. Specifically, a condition existed, at a minimum, from 1988 (and possibly as far back as the before initial startup in 1972) in which 12 circuit breakers (magnetic-trip-only breakers) for two electrical penetrations (Nos. Q105A and Q105B) had been set improperly, and the licensee did not identify this condition adverse to quality until 1996. The condition adverse to quality involved the failure to maintain primary containment integrity in that under certain high-impedance electrical fault conditions during a postulated design basis accident, the trip-settings of the circuit breakers, which were set too high, could allow excessive current to pass through the electrical penetration circuits and damage the electrical penetration seals, causing a loss of primary containment integrity. The licensee had at least three opportunities to identify and correct this condition prior to 1996, but did not do so, as described below:

1. In July 1991, during a self-assessment that the licensee performed of Pilgrim's electrical distribution system, the licensee identified that electrical penetration protection for potential electrical faults within the primary containment had not been addressed for Pilgrim Station. Although the licensee performed an operability evaluation to address this problem at that time, the evaluation was based on an incorrect assumption that the 1300 percent thermal overload of the motor starters (for the motors powered by the 12 affected electrical circuits) could provide adequate protection of the circuits. Therefore, the incorrect breaker trip setting problem was not corrected at that time.
2. In 1992, while performing calculation PS-119 for the purpose of evaluating electrical penetrations under normal plant operation, the licensee noted that some of the circuits protected from overload by thermal relays, were not adequately protected from short-circuits because the settings of the magnetic-trip-only circuit breakers exceeded National Electric Code (NEC) limits. The licensee failed to pursue this further to identify that the circuit breaker manufacturer's technical manual required adherence to the NEC limits. Therefore, the licensee again failed to correct the improper trip setting of the breakers.
3. In July 1993, the licensee initiated action to resolve the 1991 self-assessment findings by developing plans to replace the magnetic-trip-only breakers. However, licensee staff mischaracterized the corrective actions as enhancements, and therefore, the affected circuit breakers were not replaced until 1996. (IFS 01023)

These violations represent a Severity Level III problem (Supplement I).

Pursuant to provisions of 10 CFR 2.201, Boston Edison Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other actions as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at King of Prussia, Pennsylvania
this 21. day of October 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

July 12, 1996

EA 96-181

Carolina Power & Light Company
ATTN: Mr. W. R. Campbell
Vice President
Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report Nos. 50-325, 324/96-09)

Dear Mr. Campbell:

This refers to the inspection conducted on May 1 through 28, 1996, at your Brunswick facility. The inspection included a review of the circumstances surrounding the dual unit shutdown initiated on March 17, 1996, due to inoperable Service Water System pumps. You notified the NRC Operations Center on March 17, 1996, of the dual unit shutdown and followed-up with Licensee Event Report No. 1-96-003, dated April 16, 1996. The results of our inspection were sent to you by letter dated June 7, 1996. A closed predecisional enforcement conference was conducted in the Region II office on June 24, 1996, with you and members of your staff to discuss the apparent violation, the root cause, and your corrective actions to preclude recurrence. A list of conference attendees, NRC slides, and a copy of your presentation materials are enclosed.

Based on the information developed during the inspection and the information that you provided during the conference, the NRC has determined that a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it are described in detail in the subject inspection report. The violation involves the failure to establish adequate design control measures for the review and testing of material changes for Service Water System modifications. Specifically, your design control program did not include provisions for a suitable testing program to verify the performance of new materials used for certain Service Water System pump components following system modifications in 1993 and 1994. As a result, on March 9, 1996, the 2A Nuclear Service Water System pump seized after the thrust ring impeller bolts failed. Following further investigation and the discovery of degraded conditions on two other pumps, the remaining Service Water System pumps were declared inoperable, an Unusual Event was declared, and both units were shut down. You subsequently determined the failure mechanism to be galvanic corrosion of the upper retaining ring Monel fasteners in proximity to stainless steel pump components.

Although your safety assessment concluded that nine of ten service water system pumps continued to meet their safety function, the violation is of significant regulatory concern because of the degraded pump conditions which

resulted. The failure to select appropriate pump internal bolting material and to monitor the performance of a dissimilar material application following installation introduced a potential common mode failure mechanism into the Service Water System which went undetected for an extended period of time. During the conference, you stated that the pump replacements had undergone extensive material review since development of the original specification. However, these reviews were not well documented and failed to identify this corrosion mechanism. Notwithstanding the fact that the new material used in the pump design should have been reviewed for suitability of application, an intensive program to examine *in situ* material performance and condition should have been instituted beyond that normally conducted to monitor overall performance. Therefore, the violation is classified in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III violation.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last 2 years,¹ the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process described in Section VI.B.2 of the Enforcement Policy. In this case, the NRC has concluded that it would be appropriate to give credit for *Identification*. Although the violation was revealed through an event, your initiatives to investigate and identify the cause of the March 9, 1996, pump trip were prompt and appropriate. With regard to consideration for *Corrective Action*, your immediate corrective actions included an evaluation which identified a potential common mode failure mechanism and led to the subsequent shutdown of both units. Additional corrective action included, in part: (1) replacement of the Monel bolts with Hastelloy C bolting; (2) review, for proper material selection, of changes to the Service Water System since 1991, as well as approved modifications awaiting installation; (3) development of a Material Selection Guide and Procedure for material application reviews; (4) conduct of an assessment of Service Water System component material selection and application to be completed by August 30, 1996; and (5) schedule follow-up inspections to evaluate the performance of the new Hastelloy bolting material. Based on these actions, the NRC determined that your corrective actions were both conservative and comprehensive and credit was warranted for the factor of *Corrective Action*.

Therefore, to encourage prompt identification and comprehensive correction of violations, I have been authorized, after consultation with the Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

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¹ A Severity Level III (SL III) violation was issued on April 4, 1996 (EA 96-054) related to the access authorization and fitness-for-duty programs. A SL III violation was issued on November 20, 1995 (EA 95-228) related to design control for the RHR Service Water System. Two SL III violations were issued on September 8, 1995 (EA 95-166) related to design control for HPCI/RCIC.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

Stewart D. Ebner
Regional Administrator

Docket Nos. 50-325 and 50-324
License Nos. DPR-71 and DPR-62

Enclosures: 1. Notice of Violation
2. List of Conference Attendees
3. Licensee Presentation Material
4. NRC Slides

cc w/encls:
W. Levis, Director
Site Operations
Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461

R. P. Lopriore
Plant Manager
Brunswick Steam Electric Plant
Carolina Power & Light Company
P. O. Box 10429
Southport, NC 28461

cc w/encls: (Cont'd on Page 4)

cc w/encls (Cont'd):

J. Cowan, Manager
Operations & Environmental
Support MS OHS7
Carolina Power & Light Company
P. O. Box 1551
Raleigh, NC 27602

W. D. Johnson, Vice President
and Senior Counsel
Carolina Power & Light Company
P. O. Box 1551
Raleigh, NC 27602

Dayne H. Brown, Director
Division of Radiation Protection
N. C. Department of Environmental
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P. O. Box 27687
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Karen E. Long
Assistant Attorney General
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P. O. Box 629
Raleigh, NC 27602

Robert P. Gruber
Executive Director
Public Staff - NCUC
P. O. Box 29520
Raleigh, NC 27626-0520

Public Service Commission
State of South Carolina
P. O. Box 11649
Columbia, SC 29211

Jerry W. Jones, Chairman
Brunswick County Board of
Commissioners
P. O. Box 249
Bolivia, NC 28422

Dan E. Summers
Emergency Management Coordinator
New Hanover County Department of
Emergency Management
P. O. Box 1525
Wilmington, NC 28402

cc w/encls: (Cont'd on Page 6)

CP&L

5

cc w/enc's (Cont'd):
Norman R. Holden, Mayor
City of Southport
201 East Moore Street
Southport, NC 28461

NOTICE OF VIOLATION

Carolina Power and Light Company
Brunswick Steam Electric Plant

Docket Nos. 50-325 and 50-324
License Nos. DPR-71 and DPR-62
EA 96-181

During an NRC inspection conducted on May 1 through 28, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

10 CFR 50, Appendix B, Criterion III, Design Control, requires that measures shall be established for the review for suitability of applications of materials, parts, equipment, and processes that are essential to the safety-related functions of structures, systems and components. Design control measures shall be applied to the compatibility of materials and shall provide for verifying or checking the adequacy of design such as by the performance of design reviews or a suitable test program.

Contrary to the above, the licensee failed to establish adequate design controls measures for the verification and testing of material changes made in the Service Water System pump during modifications implemented in 1993 and 1994. Specifically, the installation of new Monel bolts in the Service Water System pumps as part of a revision to modifications 82-220L and 82-221L were not adequately reviewed for suitability of application or adequately verified to be acceptable through a suitable test program. As a result, the 2A Nuclear Service Water pump seized on March 9, 1996, after the thrust ring impeller bolts failed due to corrosion. Degraded conditions were discovered in other Service Water System pumps following disassembly. (01013)

This is a Severity Level III violation (Supplement I)

Pursuant to the provisions of 10 CFR 2.201, Carolina Power & Light Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the Brunswick Steam Electric Plant, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued

Enclosure 1

as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Atlanta, Georgia
this 12 day of July 1996

LIST OF PREDECISIONAL ENFORCEMENT CONFERENCE ATTENDEES
JUNE 24, 1996

Carolina Power and Light Company

W. Orser, Executive Vice President, Nuclear Generation
W. Campbell, Vice President, Brunswick Nuclear Plant
H. Habermeyer, Vice President, Nuclear Engineering Department
J. Franke, Superintendent, Mechanical Balance of Plant Systems
G. Hicks, Manager, Regulatory Affairs, Brunswick Nuclear Plant
J. Lyash, Manager, Brunswick Nuclear Engineering
T. Walt, Manager, Performance Evaluation and Regulatory Affairs
R. Grazio, Chief Engineer

Consultants:

N. Cole, MPR Associates
R. Hanford, Retired, Brunswick Nuclear Plant
J. Nestell, MPR Associates

Nuclear Regulatory Commission

L. Reyes, Deputy Regional Administrator, Region II (RII)
J. Johnson, Acting Director, Division of Reactor Projects (DRP)
C. Evans, Regional Counsel, RII
G. Imbro, Director, Project Directorate II, Office of Nuclear
Reactor Regulation (NRR)
B. Uryc, Director, Enforcement and Investigations Coordination Staff (EICS),
RII
C. Casto, Chief, Division Reactor Safety (DRS), Engineering Branch, RII
M. Shymlock, Chief, Reactor Projects Branch 4 (RPB4), DRP, RII
D. Trimble, Brunswick Project Manager, NRR
J. Davis, Division of Engineering, NRR
C. Patterson, Senior Resident Inspector, Brunswick, DRP, RII
G. Wiseman, Project Engineer, DRP, RPB4, RII
J. Lenahan, Reactor Inspector, DRS, Engineering Branch, RII

Enclosure 2

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

December 13, 1996

EA 96-442

Carolina Power & Light Company
ATTN: Mr. W. R. Campbell
Vice President
Brunswick Steam Electric Plant
Post Office Box 10429
Southport, North Carolina 28461

SUBJECT: NOTICE OF VIOLATION
(NRC INSPECTION REPORT NOS. 50-325/96-16 AND 50-324/96-16)

Dear Mr. Campbell:

This refers to the integrated inspection completed on October 26, 1996 at your Brunswick facility. The inspection included a review of your failure to provide temperature compensation for the Plant Process Computer (PPC) feedwater flow algorithm which resulted in operation of Brunswick Unit 2 in excess of (1) the maximum thermal power authorized by the license and (2) thermal limits required by Technical Specification (TS) 3.2.1. The inspection report was sent to you by letter dated November 22, 1996. A closed, predecisional enforcement conference was conducted in the Region II office on December 9, 1996, with you and members of your staff to discuss the apparent violations, the root causes, and your corrective actions to preclude recurrence. A list of conference attendees, NRC slides, and a copy of your presentation materials are enclosed.

Based on the information developed during the inspection and the information you provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report. Violation A involves the failure to maintain the Unit 2 thermal power within the operating license limits. On August 28, 1996, a reactor engineer reviewing core thermal power calculations associated with the Power Uprate Project determined that the Unit 2 PPC point value for feedwater flow was not properly compensated for feedwater temperature deviations from the normal operating temperature. The condition had existed on Unit 2 since the unit restarted after a refueling outage ending in July 1994 when Unit 2 was modified to add a new PPC and associated software. Due to the failure to temperature compensate the feedwater flow process point value, the core thermal power calculated and indicated by the PPC was less than the actual core thermal power. During periods when feedwater temperature was lower than the normal operating value, Unit 2 was operated at indicated power levels of up to 100 percent power or 2436 megawatts (MW) thermal which was equivalent to actual power levels of up to 102.4 percent power or 2494 MW thermal. This is a violation of License Condition 2.C.1 of Facility Operating License Number DPR-62 which requires that Unit 2 be operated at or less than 2436 MW thermal.

Violation B involves the failure to maintain the calculated Average Planar Linear Heat Generation Rate (APLHGR) within the limits of TS 3.2.1. The APLHGR limits vary based on power level and feedwater flow to assure that the fuel thermal-mechanical design criteria are preserved during abnormal transients. TS 3.2.1 specifies the approved methodology for determining the limits placed on APLHGR for a given power level and feedwater flow rate. Due to the failure to appropriately compensate for feedwater temperature, the calculated reactor power level inputs to the APLHGR calculation were incorrect and the resulting APLHGR value was non-conservative. The APLHGR values, as calculated using the actual power levels, exceeded the limits specified by TS 3.2.1 between December 10 and December 20, 1995. During the predecisional enforcement conference, your staff noted that the approved methodology for calculating the APLHGR limits specified by TS 3.2.1 was based on generic APLHGR adjustment factors. Your re-analysis of the APLHGR limits using cycle specific adjustment factors indicated that the APLHGR values, based on actual power levels between December 10 and December 20, 1995, were within cycle specific design limits. Although the re-analysis indicates that the actual safety consequence of Violation B was low; the NRC considers any change in reactor parameters that cause unanticipated reductions in the margin of safety to be a significant regulatory concern.

The root causes of the violations included the failure of your design team to properly link the Unit 2 feedwater flow process points to the appropriate compensation formula in the Unit 2 compensation database. The computer index labels for the Unit 2 feedwater flow process points were changed when additional process points were loaded into the database. Due to the inappropriate index labels, the computer linked a compensation value of one to the points instead of the correct compensation value. Your post-modification acceptance testing for the new PPC did not verify that process point numbering was the same in both units and did not verify that the correct relationships between process points and compensation values were preserved when your design team, in an effort to reduce differences between the two units, copied the existing PPC database configuration from the Unit 1 PPC to the Unit 2 PPC.

These violations represent a significant failure to control design parameters that affected the integrity of reactor core protection systems. The NRC expects licensees to provide meticulous oversight of vendor changes to plant process computer software and to conduct comprehensive post-modification testing of new software used to assure operation within specified acceptable fuel design limits. In this case, the NRC is particularly concerned that specified core operating limits were exceeded due to the inadequate design control and testing. Therefore, these violations are classified in the aggregate in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy) NUREG-1600, as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III problem. Because your facility has been the subject of escalated enforcement actions within the last

two years¹, the NRC considered whether credit was warranted for Identification and Corrective Action in accordance with the civil penalty assessment process described in Section VI.B.2 of the Enforcement Policy. The NRC concluded that credit was warranted for Identification because your staff identified both violations. With regard to consideration for Corrective Action, your corrective actions included: (1) effective, immediate corrective actions to reduce power and correct the software deficiency; (2) revalidation of critical plant process computer functions and confirmation of appropriate testing of the software; (3) review of other computer applications; (4) enhancements to the control of design and testing of computer products; and, (5) training on lessons learned and software configuration control. Based on the above, the NRC determined that credit was warranted for Corrective Action.

The application of the factors considered in the civil penalty assessment process, absent the exercise of discretion, resulted in no civil penalty. However, you should be aware that the NRC considered imposing a civil penalty, under Section VII.A of the Enforcement Policy, because of the potential impact of weak vendor oversight and inadequate design control and testing of software affecting core operating parameters. However, because your reactor engineer demonstrated a safety conscious attitude which resulted in the identification of the software deficiency and to encourage prompt identification and comprehensive correction of violations, I have been authorized, after consultation with the Office of Enforcement, not to propose a civil penalty in this case. Significant violations in this area in the future could result in a civil penalty.

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

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¹ A Severity Level III violation was issued on November 19, 1996, (EA 96-354) related to environmental qualification program deficiencies. A Severity Level III violation was issued on July 12, 1996, (EA 96-181) related to design control measures for service water system modifications. A Severity Level III violation was issued on April 4, 1996, (EA 96-054) for failure to meet fitness-for-duty requirements. A Severity Level III violation was issued on November 20, 1995, (EA 95-228) related to suitability of materials used in valves in the residual heat removal system. A Severity Level III problem was issued on September 8, 1995, (EA 95-166) related to design control, modification and testing of the high pressure injection system and reactor core isolation cooling system.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

Stewart D. Ebrieter
Regional Administrator

Docket Nos. 50-324
License Nos. DPR-62

- Enclosures:
1. Notice of Violation
  2. List of Conference Attendees
(Not to be Published in NUREG-0940)
  3. Licensee Presentation Material
(Not to be Published in NUREG-0940)
  4. NRC Slides (Not to be Published in NUREG-0940)

cc w/encl:
W. Levis, Director
Site Operations
Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461

R. P. Lopriore
Plant Manager
Brunswick Steam Electric Plant
Carolina Power & Light Company
P. O. Box 10429
Southport, NC 28461

J. Cowan, Vice President
Operations & Environmental
Support MS OHS7
Carolina Power & Light Company
P. O. Box 1551
Raleigh, NC 27602

Gerald D. Hicks
Manager - Regulatory Affairs
Carolina Power & Light Company
P. O. Box 10429
Southport, NC 28461

cc w/encls cont'd:

W. D. Johnson, Vice President
and Senior Counsel
Carolina Power & Light Company
P. O. Box 1551
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Division of Radiation Protection
N. C. Department of Environmental
Health & Natural Resources
P. O. Box 27687
Raleigh, NC 27611-7687

Karen E. Long
Assistant Attorney General
State of North Carolina
P. O. Box 629
Raleigh, NC 27602

Robert P. Gruber
Executive Director
Public Staff - NCUC
P. O. Box 29520
Raleigh, NC 27626-0520

Public Service Commission
State of South Carolina
P. O. Box 11649
Columbia, SC 29211

Jerry W. Jones, Chairman
Brunswick County Board of
Commissioners
P. O. Box 249
Bolivia, NC 28422

Dan E. Summers
Emergency Management Coordinator
New Hanover County Department of
Emergency Management
P. O. Box 1525
Wilmington, NC 28402

William H. Crowe, Mayor
City of Southport
201 East Moore Street
Southport, NC 28461

NOTICE OF VIOLATION

Carolina Power and Light Company
Brunswick Steam Electric Plant
Unit 2

Docket Nos. 50-324
License Nos. DPR-62
EA 96-442

During an NRC inspection completed on October 26, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. Facility Operating License Number DPR-62, Section 2.C.1, Maximum Power Level, authorizes the licensee to operate the facility at steady state reactor core power levels not in excess of 2436 megawatts (Mw) (thermal).

Contrary to the above, during the time periods listed below, the licensee failed to operate the facility within steady state reactor core power level limit of 2436 (Mw) (thermal):

<u>Dates</u>	<u>Power Level (MW)</u>	<u>Percent Power</u>
July 5, 1994 thru September 6, 1995	2446 Mw	100.4% Power
(including February 26, 1995 at	2460 Mw	101.0% Power)
March 26 thru August 28, 1996	2441 Mw	100.2% Power
(including April 17 thru 26, 1996 at	2492 Mw	102.3% Power
and July 19 thru 26, 1996 at	2494 Mw	102.4% Power)(01013)

- B. Technical Specification 3.2.1 requires in part, that during power operation, the AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR), for each type of fuel as a function of axial location and AVERAGE PLANAR EXPOSURE shall not exceed limits based on applicable APLHGR limit values that have been approved for the respective fuel and lattice type and determined by the approved methodology described in GESTAR-II.

Contrary to the above, between December 10 and December 20, 1995, during power operation, the licensee failed to maintain the APLHGR within the applicable approved APLHGR limit values specified in Technical Specification 3.2.1. (01023)

These violations represent a Severity Level III problem (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, Carolina Power & Light Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the Brunswick Steam Electric Plant, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for

Enclosure 1

disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Atlanta, Georgia
this 13th day of December 1996

LIST OF PREDECISIONAL ENFORCEMENT CONFERENCE ATTENDEES
DECEMBER 9, 1996

Carolina Power and Light Company

W. Orser, Executive Vice President, Nuclear Generation
W. Campbell, Vice President, Brunswick Nuclear Plant
H. Habermeyer, Jr., Vice President, Nuclear Engineering Department
J. Lyash, Manager, Brunswick Nuclear Engineering
T. Walt, Manager, Operations and Environmental Support
B. Boylston, Superintendent, Information Technology
M. Carroll, Manager, Nuclear Information Technology
B. Lindgren, Manager, Site Support Services
G. Smith, Superintendent, NSSS, Engineering
R. Hill, Reactor Engineer

Nuclear Regulatory Commission

L. Reyes, Deputy Regional Administrator, Region II (RII)
E. Merschhoff, Director, Division of Reactor Projects (DRP), RII
B. Uryc, Director, Enforcement and Investigation Coordination Staff (EICS), RII
M. Shymlock, Chief, Reactor Projects Branch 4 (RPB4), DRP, RII
M. Reinhart, Director, Directorate II-1, NRR (by phone)
D. Trimble, Project Manager, NRR
G. Golub, Engineer, Reactor Systems Branch, NRR
L. Watson, Enforcement Specialist, EICS, RII
C. Evans, Regional Counsel, RII
C. Patterson, Senior Resident Inspector, Brunswick, DRP, RII
J. Dixon-Herrity, Enforcement Coordinator, Office of Enforcement (by phone)

Enclosure 2

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

November 6, 1996

EA 96-367

Mr. Lew W. Myers
Vice President - Nuclear
Centerior Service Company
P. O. Box 97, A200
Perry, OH 44081

SUBJECT: NOTICE OF VIOLATION
(NRC SPECIAL INSPECTION REPORT NO. 50-440/96008(DRS))

Dear Mr. Myers:

This refers to the inspection conducted on August 26 through September 11, 1996, at the Perry Nuclear Power Plant. The inspection included a review of the circumstances surrounding the loss of both trains of the Emergency Closed Cooling (ECC) system in 1993, and the loss of both trains of Control Room Emergency Recirculation due to low ECC temperature in 1994. The report documenting the inspection was sent by letter dated September 17, 1996, and a predecisional enforcement conference was conducted on October 11, 1996. These events were reported to the NRC in Licensee Event Reports dated January 24 and October 28, 1994.

Based on the information developed during the inspection and the information that was provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding the violations are described in detail in the subject inspection report.

In July 1993, during performance of a heat exchanger performance test on ECC Train A, the surge tank overflowed. Subsequent review determined that ECC/Nuclear Closed Cooling butterfly isolation motor-operated valve (MOV) OP42-F295A was leaking in excess of 250 gallons per minute (gpm) because the valve was stroking past its full closed position as a result of mispositioned limit switches and mechanical stops. The limit switches and mechanical stops were subsequently re-adjusted and the valve was satisfactorily tested.

The valve limit switches and mechanical stops had been previously adjusted on March 19, 1993; therefore, the valve was unable to perform its isolation function from March 19 to July 2, 1993. ECC Train A was inoperable because in the event of a loss of offsite power/loss of coolant accident (LOOP/LOCA) with a single active failure of the Division 2 emergency diesel generator, it would have lost inventory at a rate such that, within one minute of receipt of the surge tank low level alarm, the Train A pump would begin to cavitate. The plant was in Operational Conditions 1, 2, or 3 from June 2 to July 2, 1993. Additionally, during this period both trains of ECC were inoperable for approximately 45 hours while the Division 2 emergency diesel generator was out of service.

The root causes of the event were personnel error and weak procedural direction for setting MOV limit switches and mechanical stops in 1993 and the failure to classify valves OP42-F295A/B as ASME Section XI Category A valves for which seat leakage is limited to a specific maximum amount.

The violations in Section I of the Notice represent a significant failure to comply with the action statement for a Technical Specification Limiting Condition for Operation and are classified in the aggregate in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III problem. Because your facility has been the subject of escalated enforcement actions within the previous two years¹ prior to your identification of the violations in December 1993, the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit was warranted for your architect/engineer's identification that both trains of ECC had been inoperable in December 1993.

Credit was warranted for your corrective actions for the violations in Section I of the Notice. These included re-adjusting the limit switches and mechanical stops on valve OP42-F295A and conducting post-maintenance testing to verify the valve would function as required; initiating an engineering evaluation to determine if the potential for an incorrectly set butterfly valve limit switch or mechanical stop on other systems could cause a similar problem; revising the Limitorque Limit/Torque Switch adjustment procedure to require a post-maintenance leakage test on butterfly MOVs which have an established seat leakage limit and clarify instructions for setting limit switches and checking mechanical stop nut settings; and providing training to maintenance and system engineering personnel on this event and the necessity of verifying proper butterfly valve closure. Although the NRC identified during the 1996 inspection that valves OP42-F295A/B and OP42-F325A/B were not properly classified as Category "A" in the in-service testing program, the valves had been tested within the frequency specified for Category "A" valves as a result of Generic Letter 89-10 and preventive maintenance activities. This failure to classify the valves as Category "A" had been previously identified by your staff in January 1994 but no action was taken. The failure to take corrective action for this isolated deficiency is cited in Section II of the Notice. The in-service testing program was subsequently revised to properly classify these valves.

Therefore, to encourage prompt identification and comprehensive correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

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¹ A Severity Level III violation for failure to take corrective action (identified in June 1993) was issued on August 31, 1993 (EA 93-176).

November 6, 1996

Section II of the Notice describes two violations involving failure to (1) take adequate corrective actions to prevent ECC system temperature from decreasing below 55° F, and to (2) classify certain valves as Category "A" in the in-service testing program. Each of these violations has been categorized at Severity Level IV in accordance with the Enforcement Policy.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

A. Bill Beach
Regional Administrator

Docket No. 50-440
License No. NPF-58

Enclosure: Notice of Violation

cc w/encl: J. P. Stetz, Senior Vice
President, Nuclear
L. W. Worley, Director, Nuclear
Services Department
J. D. Kloosterman, Manager,
Regulatory Affairs
W. R. Kanda, Director, Perry Nuclear
Assurance Department
N. L. Bonner, Director, Perry
Nuclear Engineering Dept.
H. Ray Caldwell, General
Superintendent Nuclear Operations
R. D. Brandt, General Manager Operations
Terry J. Lodge, Esq.
State Liaison Officer, State of Ohio
Robert E. Owen, Ohio
Department of Health
C. A. Glazer, State of Ohio,
Public Utilities Commission

NOTICE OF VIOLATION

Centerior Service Company
Perry Nuclear Power Plant

Docket No. 50-440
License No. NPF-58
EA 96-367

During an NRC inspection conducted on August 26 through September 11, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- I. Technical Specification 3.7.1.2 requires, for Operational Conditions 1, 2, 3, 4, and 5, the emergency closed cooling (ECC) loop(s) shall be operable which are associated with systems or components which are required to be operable. With an ECC loop(s) inoperable which is associated with system(s) or component(s) required to be operable, declare the associated system(s) or component(s) inoperable and take the action required by the applicable specification(s).
  - A. Contrary to the above, from March 19 to July 2, 1993, while the plant was in Operational Conditions 1, 2, 3, 4, or 5, ECC Train A was inoperable and its associated systems or components were not declared inoperable, and action was not taken for its associated systems or components as required by the applicable specifications. (01013)
  - B. Contrary to the above, from 3:13 a.m. on June 14, 1993, until 11:05 p.m. on June 15, 1993, a period of about 45 hours, while the plant was in Operational Conditions 1, 2, or 3, both trains of ECC were inoperable and their associated systems or components were not declared inoperable, and action was not taken for their associated systems or components as required by the applicable specifications. (01023)

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

- II. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.
  - A. Contrary to the above, as of September 11, 1996, the licensee had failed to promptly correct a significant condition adverse to quality as demonstrated by the following:
    1. In February 1986, a control complex chiller tripped on low refrigerant temperature due to low lake water temperatures (Emergency Closed Cooling water to the chiller must be greater than 55° F to meet chiller design requirements). As corrective action for this condition the licensee initiated Design Change Package (DCP) 86-0224 to alleviate the problem; however, the design change only considered ECC

accident heat loads and did not consider minimum loads when Emergency Service Water was less than 55° F.

2. In February 1994, with ESW "A" and ECC "A" running and supplying a minimal heat load, ECC "A" temperature was observed to be below 55° F.
3. DCP 94-0027 was implemented in Spring 1996 to maintain ECC temperature above 55° F with low lake water temperature and low heat load conditions and the post-modification test did not confirm the adequacy of the design. Subsequently, on March 7, 1996, ESW "A" and ECC "A" were in operation with no heat load, and ECC "A" temperature decreased from 64° F to 56° F before ESW "A" was secured to prevent ECC "A" from decreasing below 55° F. (02014)

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

- B. Contrary to the above, as of August 26, 1996, the licensee had not corrected a significant condition adverse to quality. Specifically, the licensee had previously identified on January 20, 1994, that valves OP42-F295A/B and OP42-F325A/B were not classified as Category "A" in accordance with American Society of Mechanical Engineers (ASME) Section XI, 1983, Article IWB-2000, and no corrective action was taken until this condition was identified by the NRC during a 1996 inspection. (02024)

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

Pursuant to the provisions of 10 CFR 2.201, Centerior Service Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region III, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Lisle, Illinois
this 6th day of November 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

September 11, 1996

EA 96-244

Mr. J. E. Cross
Senior Vice President
Nuclear Power Division
Duquesne Light Company
Post Office Box 4
Shippingport, Pennsylvania 15077

SUBJECT: NOTICE OF VIOLATION
(NRC INSPECTION REPORT NOS. 50-334/96-05, 50-412/96-05)

Dear Mr. Cross:

This letter refers to the NRC inspection conducted from May 14 through June 26, 1996, at your Beaver Valley Power Station facilities in Shippingport, Pennsylvania. The findings of the inspection were discussed with your staff during exit meetings and follow-up discussions on June 27, July 11, and July 12, 1996. During the inspection, the inspectors reviewed the circumstances surrounding a design deficiency associated with the Anticipated Transient Without Scram (ATWS) Mitigating System Actuation Circuitry (AMSAC). The deficiency, which was identified by your staff and reported to the NRC, constitutes a violation of NRC requirements and was described in the NRC inspection report sent to you with our letter, dated July 24, 1996. On August 28, 1996, a predecisional enforcement conference was conducted with you and members of your staff to discuss the violations, their causes, and your corrective actions.

The violation, which is set forth in the enclosed Notice of Violation, involved the failure to comply with 10 CFR 50.62 which requires that you provide an alternate means, independent of the Reactor Protection System, of tripping the turbine and actuating auxiliary feedwater under conditions indicative of an ATWS. This system must be designed to perform its functions in a reliable manner. The AMSAC system protects the reactor coolant system from overpressurization in cases where there is a concurrent failure of the Reactor Protection System. The specific AMSAC design deficiency that existed in this case involved the failure to consider, when the AMSAC system was designed and installed, the effect of static pressure on feedwater flow transmitters, as well as the effect of hydraulic fluctuations on feedwater flow, when establishing the "flow out-of-range" setpoint. As a result, under one particular scenario where the main feedwater valves close with the pumps continuing to operate, the AMSAC system may have failed. As such, the AMSAC system was not designed in a manner to perform its function in a reliable manner. This violation has existed since AMSAC was initially installed in Unit 1 in 1988 and Unit 2 in 1989.

The equipment required by 10 CFR 50.62 is intended to serve an important safety function in the event of the failure of the plant principal Reactor Protection System. This regulation was adopted following actual failures of the reactor trip system at another pressurized water reactor in 1983 and is intended to reduce the risk posed by such events. Your failure to ensure proper functioning and reliability of this system since the original installation is a significant regulatory concern. Therefore, this violation has been categorized at Severity Level III in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," (Enforcement Policy), NUREG-1600.

The NRC commends the technical inquisitiveness of the engineer who identified this issue during his follow-up review, after the turbine trip of May 31, 1996, during which AMSAC should have initiated, and after your initial post-trip review also failed to detect the deficiency. If not for his inquisitiveness, this deficiency likely would have remained undetected. Nonetheless, two other AMSAC related problems were identified in 1993 and 1994, namely, the failure to have a lock-in circuit for a variable time delay, as well as a deficiency with the AMSAC blocking logic. Although those deficiencies were not specifically related to this recently identified problem, a more thorough review of those issues at the time might have led to identification of this problem. In each case, however, a broader evaluation was not performed and this deficiency went undetected. Also, an Information Notice (Reference: Information Notice No. 91-75) was issued in 1991 which informed licensees of the need to consider the static pressure effect on transmitters. However, at that time, you failed to consider the static pressure effect on the transmitter used for AMSAC signals.

These findings demonstrate the need for management taking appropriate action to assure that your staff in general, and your engineers in particular, are sensitive to the importance of performing comprehensive, rather than narrowly-focused, evaluations in response to generic communications or site-specific identified problems. Such broader reviews are needed to assure that all potentially degraded features are promptly identified and corrected. This is particularly important for engineering issues identified on systems in which generic designs were altered prior to installation, as was the case with the AMSAC system.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has not been the subject of escalated enforcement actions within the last 2 years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit is warranted because your corrective actions were both prompt and comprehensive. Your corrective actions included prompt correction of the AMSAC system via both hardware and software design modifications implemented within one week of identification; revision of the feedwater flow transmitter calibration procedures to account for the static pressure effect, and subsequent recalibration of the flow transmitters; a review of the extent of static pressure effect on other transmitters installed in the facility; and a focused design review of AMSAC and three other systems, to ensure that similar deficiencies do not exist. The NRC also recognizes and commends, as indicated previously, the inquisitiveness of your staff in identifying this issue.

Therefore, to encourage prompt and comprehensive identification and correction of violations, and in recognition of the absence of previous escalated enforcement action, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

Hubert J. Miller
Regional Administrator

Docket Nos. 50-334, 50-412
License Nos. DPR-66, NPF-73

Enclosure: Notice of Violation

c w/encl:

S. Jain, Vice President, Nuclear Services
T. Noonan, Vice President, Nuclear Operations
L. Freeland, Manager, Nuclear Engineering Department
B. Tuite, General Manager, Nuclear Operations Unit
K. Ostrowski, Manager, Quality Services Unit
R. Brosi, Manager, Nuclear Safety Department
M. Clancy, Mayor
NRC Resident Inspector - Beaver Valley
Commonwealth of Pennsylvania
State of Ohio

ENCLOSURE

NOTICE OF VIOLATION

Duquesne Light Company
Beaver Valley Power Station

Docket Nos. 50-334, 50-412
License Nos. DPR-66, NPE-73

During an NRC inspection conducted between May 14 and June 26, 1996, for which exit meetings and follow-up discussions were held on June 27, July 11, and July 12, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG 1600, the violation is listed below:

10 CFR 50.62(c)(1) requires, in part, that each pressurized water reactor must have equipment from sensor output to final actuation device, that is diverse from the reactor trip (protection) system, to automatically initiate the auxiliary feedwater system and initiate a turbine trip under conditions indicative of an anticipated transient without scram (ATWS), and that this equipment must be designed to perform its function in a reliable manner.

Contrary to the above, since original installation in 1988 until June 1996 for Unit 1, and since original installation in 1989 until June 1996 for Unit 2, the ATWS Mitigation System Circuitry (AMSAC), (i.e., the equipment installed to automatically initiate the auxiliary feedwater system and initiate a turbine trip under conditions indicative of an ATWS) had not been designed to perform its function in a reliable manner. This equipment was not designed to perform its function in a reliable manner in that a design deficiency that had been present since the original installation of the system, namely, the failure to incorporate static pressure effect and hydraulic fluctuations in the design margin for "out-of-range" flow signals. The deficiency was evidenced by the fact that on May 31, 1996, a transient occurred in which, although the reactor trip system functioned as required, conditions also existed (namely, a loss of normal feedwater) which should have caused the AMSAC to initiate. However, AMSAC failed to initiate as expected during this operational occurrence. (IFS 01013)

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

Pursuant to the provisions of 10 CFR 2.201, Duquesne Light Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the

correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an Order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at King of Prussia, Pennsylvania
this 11th day of September 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

November 7, 1996

EA 96-329

John R. McGaha, Vice President - Operations
River Bend Station
Entergy Operations, Inc.
P.O. Box 220
St. Francisville, Louisiana 70775

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report No. 50-458/96-26)

Dear Mr. McGaha:

This refers to an inspection conducted on July 29 through August 27, 1996, at the River Bend Station (RBS) reactor facility. This special inspection included a review of the failure to perform or to properly complete surveillance testing on several safety-related components. The results of the inspection were discussed with your staff on September 6, 1996, and the subject inspection report was issued on September 10, 1996. The cover letter to the inspection report noted that the apparent violations identified in the report were being considered for escalated enforcement but that it was not necessary to conduct a predecisional enforcement conference in order for the NRC to make an enforcement decision. As such, we gave you the opportunity to either request a predecisional enforcement conference or respond to the apparent violations in writing. You did not request a conference but, instead, responded to the apparent violations by letter dated October 10, 1996.

Based on the information developed during the inspection and the information that you provided in your October 10 response, the NRC has determined that violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report. The violations involve the failure to perform surveillance testing in accordance with the requirements specified in the Technical Specifications. The six violations involve the failure to perform or adequately perform surveillance testing on the following equipment: (1) the Division I battery, (2) the Division III battery, (3) the drywell airlock, (4) the drywell combination equipment hatch/personnel door, (5) the prefilters for the standby gas treatment, control room fresh air, and fuel building ventilation systems, and (6) a primary containment penetration isolation valve.

As noted in your October 10 letter, prior to the identification of these violations, RBS identified surveillance program weaknesses, and a corrective action plan and improvement initiatives were underway. In July 1996, after issues were identified related to the Division I station service battery performance discharge data, RBS initiated a Significant Event Response Team

(SERT) and developed corrective actions based on the SERT's findings. When your staff reviewed other surveillance activities for similar problems, RBS found the remainder of the surveillance discrepancies.

Your October 10 letter stated that you believe there is adequate justification for imposition of one Severity Level IV violation based on several factors regarding the circumstances of the violations (e.g., self-identified, comprehensive corrective actions, lack of actual safety significance, and others). While we generally agree with the circumstances as you characterized, they do not provide a basis for NRC to conclude that the circumstances amounted to Severity Level IV violations. The NRC's concern is that these issues collectively represent a breakdown in your surveillance testing program and, as such, represent a significant regulatory concern. Therefore, these violations are classified in the aggregate in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III problem. Because your facility has not been the subject of escalated enforcement actions within the last 2 years, the NRC considered whether credit was warranted for Corrective Action in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Based on the various corrective actions taken by RBS staff, the NRC determined that corrective action credit is warranted. RBS took prompt corrective actions for each of the violations, including procedure revisions, discussions with personnel regarding personal accountability, enhanced training, and an additional staff engineer to provide oversight of the surveillance testing program. In addition, corrective action credit was warranted because of the comprehensive nature of the corrective actions addressing the programmatic issues. Specific corrective actions to address the program concerns included followup by Quality Assurance, additional training on technical specification bases, departmental "all-hands" meetings, comparison of the RBS program with other sites, surveillance program self-assessment, evaluations of procedure verification and validation, and focusing additional management observations on the performance of surveillance tests.

Therefore, to encourage prompt identification and comprehensive correction of violations, and in recognition of the absence of previous escalated enforcement action, I have been authorized not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

The NRC has also concluded that information regarding the reasons for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance will be achieved is already adequately addressed on the docket in the subject NRC inspection report, LER 96-014-00 dated August 9, 1996, and your October 10 response. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional

ENTERGY OPERATIONS, INC.

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information, you should follow the instructions specified in the enclosed Notice.

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

Sincerely,

L. J. Callan
Regional Administrator

Docket No.: 50-458
License No.: NPF-47

Enclosure: Notice of Violation

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ENTERGY OPERATIONS, INC.

-4-

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NOTICE OF VIOLATION

Entergy Operations, Inc.
River Bend Station

Docket No. 50-458
License No. NPF-47
EA 96-329

During an NRC inspection conducted on July 29 through August 27, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

Technical Specification Surveillance Requirement 3.0.1 states, in part, that Surveillance Requirements shall be met during the MODES or other specified conditions in the Applicability for individual Limiting Conditions for Operation, unless otherwise stated in the Surveillance Requirement.

- A. Surveillance Requirement 3.8.4.8 requires the licensee to verify that battery capacity is $\geq 80\%$ of the manufacturer's rating when subjected to a performance discharge test. The FREQUENCY of this test is 60 months AND 18 months, when the battery shows degradation or has reached 85% of expected life.

Contrary to the above, the licensee failed to perform Surveillance Requirement 3.8.4.8 within the 18-month required frequency, the appropriate frequency since the battery had shown degradation. (01013)

- B. Surveillance Requirement 3.8.4.7 requires the licensee to verify that battery capacity is adequate to supply, and maintain in OPERABLE status, the required emergency loads for the design duty cycle when subjected to a battery service test. The FREQUENCY of this test is 18 months.

Contrary to the above, the licensee failed to perform Surveillance Requirement 3.8.4.7 within the 18-month required frequency. (01023)

- C. Surveillance Requirement 3.6.5.2.5 requires the licensee to verify, from an initial pressure of 75 psig, that the drywell air lock seal pneumatic system pressure does not decay at a rate equivalent to > 0.67 psig for a period of 24 hours. The FREQUENCY of this test is 18 months.

Contrary to the above, the licensee failed to perform Surveillance Requirement 3.6.5.2.5 because a satisfactory test of the drywell air lock seal system was not performed within the required 18-month frequency. (01033)

- D. Surveillance Requirement 3.6.5.1.2 requires the licensee to verify, from an initial pressure of 75 psig, that the personnel door inflatable seal pneumatic system pressure does not decay at a

rate equivalent to ≥ 0.67 psig for a period of 24 hours. The FREQUENCY of this test is 18 months.

Contrary to the above, the licensee failed to perform Surveillance Requirement 3.6.5.1.2 because a satisfactory test of the personnel door inflatable seal pneumatic system was not performed within the required 18-month frequency. (01043)

- E. Surveillance Requirement 3.7.2.2 requires the licensee to perform required CRFA [control room fresh air] filter testing in accordance with Ventilation Filter Testing Program. Surveillance Requirement 3.6.4.3.2 requires the licensee to perform required SGT [standby gas treatment] filter testing in accordance with Ventilation Filter Testing Program. Surveillance Requirement 3.6.4.6.2 requires the licensee to perform required fuel building ventilation charcoal filtration filter testing in accordance with Ventilation Filter Testing Program.

The Ventilation Filter Testing Program, Section 5.5.7.d of the Technical Specification requires the licensee to demonstrate for each of the ESF [engineered safeguards features] systems that the pressure drop across the prefilters is less than the value specified below.

Contrary to the above, the licensee failed to perform Surveillance Requirements 3.7.2.2, 3.6.4.3.2, and 3.6.4.6.2 because testing of the system prefilters was not performed. (01053)

- F. Surveillance Requirement 3.6.1.1.1 requires the licensee to perform required leakage rate testing in accordance with the Primary Containment Leakage Rate Testing Program. The FREQUENCY of this test is in accordance with the Containment Leakage Rate Testing Program.

The Primary Containment Leakage Rate Program, as provided in Procedure ADM-0050, Revision 4, states, in part, that if the leakage for Valve 1SWP-MOV503A is less than 1200 scfm for two consecutive tests, then the valve can be tested every 5 years vice every 2 years.

Contrary to the above, the licensee failed to perform Surveillance Requirement 3.6.1.1.1 because the as-found leakage for Valve 1SWP-MOV503A was not measured during the last test performance and the licensee incorrectly assumed that the valve had passed the leakage criteria, and as a result, the test at the 2 year interval was not performed. (01063)

These violations represent a Severity Level III problem (Supplement I).

The NRC has concluded that information regarding the reasons for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence and the date when full compliance will be achieved is already adequately addressed on the docket in NRC Inspection Report 50-458/96-26, LER 96-014-00 dated August 9, 1996, and Entergy's October 10, 1996, "Response to Apparent Violations." However, Entergy Operations, Inc. (Licensee), is required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect its corrective actions or its position. In that case, or if the Licensee chooses to respond, clearly mark the response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

Dated at Arlington, Texas
this 7th day of November 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

September 19, 1996

EA 96-236 and EA 96-249

Florida Power & Light Company
ATTN: Mr. T. F. Plunkett
President - Nuclear Division
Post Office Box 14000
Juno Beach, Florida 33408-0420

SUBJECT: NOTICE OF VIOLATION (NRC Special Inspection Report Nos. 50-335 and 50-389/96-12)

Dear Mr. Plunkett:

This refers to the inspection completed on July 12, 1996, at your St. Lucie facility. The inspection included a review of selected aspects of your configuration management and 10 CFR 50.59 safety evaluation programs. The results of our inspection were sent to you by letter dated July 26, 1996. A closed, predecisional enforcement conference was conducted in the Region II office on August 19, 1996, with you and members of your staff to discuss the apparent violations, the root causes, and your corrective actions to preclude recurrence. A letter summarizing the conference was sent to you by letter dated September 11, 1996.

Based on the information developed during the inspection and the information you provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report.

The violation in Part I of the Notice involves your failure to recognize an unreviewed safety question related to the implementation of a valve lineup change to the Emergency Diesel Generator (EDG) fuel oil transfer system. Specifically, in July 1995, the licensee implemented a change to the 2B EDG system to permit closing of a manual isolation valve from the Diesel Fuel Oil Storage Tank to the day tanks in order to minimize fuel oil ground leakage between the two tanks. As part of the change, the licensee instituted administrative measures including dedication of a non-licensed operator and procedural revisions to assure timely opening of the valve following an EDG start. Although a safety evaluation performed to evaluate this change concluded that the probability of loss of the 2B3 emergency bus increased by six percent, it erroneously concluded that no increase in the probability of a component failure was created. In addition, the NRC has concluded that two new failure modes were introduced by the change: (1) potential failure of the operator to unisolate the fuel oil line and (2) failure of the manual

isolation valve to open. Therefore, both the possibility for a malfunction of a type different than any evaluated previously in the Updated Final Safety Analysis Report (UFSAR) was introduced, and the probability of a failure of a component important to safety was increased, representing a valid unreviewed safety question.

At the conference, you stated that a safety evaluation was prepared for this change consistent with Florida Power and Light Company procedures and industry guidance (NSAC-125). However, NRC's position with respect to an "increase in probability" differs. Although the NRC recognizes in this case that the increase in probability of component failure was small, a normally passive component was made active and an absolute increase in probability was realized. Notwithstanding the small probability increase, the violation in Part I of the Notice is of significant regulatory concern because a change was made to the EDG system resulting in the emergence of an unreviewed safety question for which a license amendment and NRC approval was not sought. Further, such failures to comply with the requirements of 10 CFR 50.59 resulted in facility operations which depart from the licensing and or design bases described in the UFSAR. Therefore, the violation in Part I of the Notice is classified in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III violation.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last two years¹, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process described in Section VI.B.2 of the Enforcement Policy. In this case, the NRC concluded that it is not appropriate to give credit for *Identification* because the violation was discovered by the NRC. With regard to consideration for *Corrective Action*, at the conference you stated that your actions related to the violation in Part I of the Notice included revision of engineering safety evaluation guidance to clarify the definition of an increase in probability and issuance of a technical alert to all engineers regarding this issue. Further, although not directly related to this violation, additional emphasis has been placed on the importance of 10 CFR 50.59 and the UFSAR. Your recent actions in this regard include: (1) 10 CFR 50.59 reviewer certification; (2) additional 10 CFR 50.59 training for designated staff; (3) 10 CFR 50.59 procedural enhancements; and (4) implementation of the UFSAR Review Project. Based on the above, the NRC determined that credit was warranted for *Corrective Action*, resulting in the base civil penalty.

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¹ A Severity Level III problem and proposed civil penalty of \$50,000 were issued on March 28, 1996 (EA 96-040) related to a reactor coolant system boron dilution event. A Severity Level III violation and proposed civil penalty were issued on November 13, 1995 (EA 95-180) related to inoperable power operated relief valves.

As a result of these considerations, a civil penalty of \$50,000 would normally be warranted for this Severity Level III violation. However, in this case, you did perform a 50.59 evaluation and promptly thereafter communicated with the NRC staff and discussed your plans to reposition the fuel oil transfer isolation valve, as well as your preparatory and compensatory measures to minimize the potential for system failure. Accordingly, under the circumstance of this case, a civil penalty is not warranted. I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, to exercise enforcement discretion, in accordance with the guidance set forth in Section VII.B.6 of the Enforcement Policy, and not propose a civil penalty in this case.

Violations A and B described in Part II of the Notice have been categorized at Severity Level IV. The violations involve four instances where you failed to effectively incorporate design changes into plant operating procedures or drawings. These violations were NRC identified and are of concern because of the potential for misleading operators and the similarity of the violations to annunciator response procedure deficiencies identified during previous inspections. The fifth apparent example of the configuration management violation discussed at the conference involved your failure to incorporate properly the spent fuel pool heat load calculation into operational procedure limitations prior to initiating core off-load. For this issue, the NRC has decided to exercise discretion and characterize the violation as non-cited (NCV 50-335/96-12-01) in accordance with Section VII.B.1 of the Enforcement Policy. Specifically, you identified the violation and promptly instituted appropriate corrective action.

NRC has concluded that no violation occurred with respect to the three additional apparent failures to comply with 10 CFR 50.59 addressed in the subject inspection report and discussed at the conference. Specifically, (1) the Unit 2 Control Element Drive Mechanism Control System Enclosure was not required to be included in the UFSAR, and installation and subsequent modifications did not require 10 CFR 50.59 safety evaluations; (2) the configuration of a temporary fire pump placed in stand-by during the 1996 Unit 1 refueling outage did not require a 10 CFR 50.59 evaluation in that the configuration was as described in the UFSAR (i.e., the discharge valve was closed and the pump was isolated from the system); and (3) the failure to perform a 10 CFR 50.59 safety evaluation to change the setpoints and procedures for operating the fuel hoist was identified and corrected by you prior to actual fuel movement. This letter closes any further NRC action on these matters.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

Stewart D. Ebnetter
Regional Administrator

Docket Nos. 50-335, 50-389
License Nos. DPR-67, NPF-16

Enclosure: Notice of Violations

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cc w/encl: (Cont'd on Page 5)

cc w/enc1 (Cont'd):

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Tallahassee, FL 32399-1400

Joe Myers, Director
Division of Emergency Preparedness
Department of Community Affairs
2740 Centerview Drive
Tallahassee, FL 32399-2100

Thomas R. L. Kindred
County Administrator
St. Lucie County
2300 Virginia Avenue
Ft. Pierce, FL 34982

Charles B. Brinkman
Washington Nuclear Operations
ABB Combustion Engineering, Inc.
12300 Twinbrook Parkway, Suite 3300
Rockville, MD 20852

NOTICE OF VIOLATION

Florida Power and Light Company
St. Lucie Nuclear Plant

Docket Nos. 50-335, 50-389
License Nos. DPR-67, NPF-16
EA 96-236 and 96-249

During an NRC inspection completed on July 12, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- I. 10 CFR 50.59, "Changes, Tests and Experiments," provides, in part, that the licensee may make changes in the facility as described in the Safety Analysis Report (SAR) without prior Commission approval, unless the proposed change involves an unreviewed safety question. A proposed change shall be deemed to involve an unreviewed safety question if the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the SAR may be increased, if a possibility for an accident or malfunction of a different type than any evaluated previously in the SAR may be created, or if the margin of safety as defined in the basis for any technical specification is reduced.

Contrary to the above, in July 1995, the licensee made a change to the facility which involved an unreviewed safety question without prior Commission approval. Specifically, the 2B Emergency Diesel Generator (EDG) fuel oil line was manually isolated to secure a through-wall fuel oil leak. In taking this action, the licensee introduced two new failure modes for the 2B EDG, which both increased the probability of occurrence of a malfunction of the EDG above that previously evaluated in the SAR and the possibility for malfunction of a different type than any evaluated previously in the SAR, resulting in an unreviewed safety question. (01013)

This is a Severity Level III violation (Supplement I)

- II. 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," Criterion III requires, in part, that measures be established to assure that applicable regulatory requirements and the design basis for safety-related structures, systems, and components are correctly translated into specifications, drawings, procedures, and instructions.

Florida Power and Light Company Topical Quality Assurance Report, TQR 3.0, Revision 11 implements these requirements. Section 3.2, "Design Change Control," provides, in part, that design changes shall be reviewed to ensure their implementation is in each case, coordinated with any necessary changes to operating procedures. In addition, Section 3.2.4, "Design Verification," provides, in part, that design control measures shall be established to verify the design inputs, design process, and that the design inputs are correctly incorporated into the design output.

- A. Contrary to the above, the licensee failed to coordinate design changes with the necessary changes to operating procedures as evidenced by the following examples:
1. Plant Change/Modification (PC/M) 109-294, "Setpoint Change to the Hydrazine Low Level Alarm (LIS-07-9)," was completed on January 6, 1995, without ensuring that affected Procedure ONOP 2-0030121, "Plant Annunciator Summary," was revised. This resulted in Annunciator S-10, "HYDRAZINE TK LEVEL LO," showing an incorrect setpoint of 35.5 inches in the procedure.
  2. PC/M 268-292, "Intake Cooling Water Lube Water Piping Removal and Circulatory Water Lube Water Piping Renovation," was completed on February 14, 1994, without ensuring that affected Procedure ONOP 2-0020131, "Plant Annunciator Summary," was revised. This resulted in the instructions for Annunciator E-16, "CIRC WTR PP LUBE SPLY BACKUP IN SERVICE," incorrectly requiring operators to verify the position of valves MV 21-4A and 4B following a safety injection actuation system signal to ensure they were de-energized and had no control room position indication.
  3. PC/M 275-290, "Flow Indicator/Switch Low Flow Alarm and Manual Annunciator Deletions," was completed on October 28, 1992, without ensuring that affected Procedure ONOP 2-0030131, "Plant Annunciator Summary," was revised. This resulted in the instructions for safety-related Annunciators LA-12, "ATM STM DUMP MV-08-18A/18B OVERLOAD/SS ISOL," and LB-12, "ATM STM DMP MV-08-19A/19B OVERLOAD/SS ISOL," incorrectly requiring operators to check Auto/Manual switch or switches for the manual position. (02014)

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

- B. Contrary to the above, the licensee failed to assure that the design of the Circulating and Intake Cooling Water System was correctly translated into plant drawings. Specifically, during implementation of PC/M 341-192, "Intake Cooling Water Lube Water Piping Removal and Circulatory Water Lube Water Piping Renovation," the as-built Drawing No. JPN-241-192-008 was not incorporated into Drawing No. 8770-G-082, "Flow Diagram Circulating and Intake Cooling Water System," Revision 11, Sheet 2, issued May 9, 1995, for PC/M 341-192. This resulted in Drawing No. 8770-G-082 erroneously showing valves 1-FCV-21-3A and 3B and associated piping as still installed. (03014)

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

Pursuant to the provisions of 10 CFR 2.201, Florida Power & Light Company is hereby required to submit a written statement or explanation to the

Notice of Violation

- 3 -

U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Atlanta, Georgia
this 19th day of September 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

December 31, 1996

EA 96-479

Georgia Power Company
ATTN: Mr. C. K. McCoy
Vice President
Vogtle Electric Generating Plant
P. O. Box 1295
Birmingham, AL 35201

SUBJECT: NOTICE OF VIOLATION (NRC Inspection Report Nos. 50-424 and
50-425/96-11)

This refers to the inspection conducted during the period September 29 through November 9, 1996, at your Vogtle Electric Generating Plant (VEGP). The inspection included a review of the facts and circumstances surrounding installation deficiencies associated with certain safety-related motor coolers as well as the program for maintaining this equipment. The results of this inspection were discussed with members of your staff on November 12, 1996, and were formally transmitted to you by letter dated December 5, 1996. In addition, on November 27, 1996, you submitted Licensee Event Report No. 50-424/96-010 which addressed the inoperability of the Unit 1 safety injection pump B (1B SIP) due to degraded motor cooling. An open predecisional enforcement conference was conducted in the Region II office on December 19, 1996, with you and members of your staff to discuss the apparent violation, the root causes, and corrective actions to preclude recurrence. A list of conference attendees, a copy of your presentation materials, and NRC slides are enclosed.

Based on the information developed during the inspection and the information that was provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding them are described in detail in the subject inspection report. Violation A involved the inoperability of the 1B SIP for a period greater than that allowed by Technical Specifications (TS) due to inadequate pump motor cooling. The inoperable condition existed from at least September 1991 when maintenance was last performed on the 1B SIP motor coolers and may have existed for some indeterminate period prior to that time. Specifically, during the period October 23-25, 1996, you determined that the cooling flow through the two motor coolers for this pump was degraded to approximately one-sixth of the normal flow. The condition was caused by improper installation of a gasket on the inboard motor cooler which blocked all flow in that cooler and improper installation of a plenum in the other motor cooler which reduced flow through it by two-thirds. In addition, your subsequent investigation identified similarly reversed plenums on a Unit 2 Train A containment spray pump motor cooler, a Unit 1 Auxiliary Component Cooling Water (ACCW) Pump 2 motor cooler, and both Unit 2 ACCW Pump 1 motor coolers.

Violation B involves your failure to establish adequate procedures for the disassembly and reassembly of the motor coolers during maintenance activities. Although some guidance was provided in the maintenance checklist to instruct personnel to re-install gaskets and plenums, the procedure was general and provided insufficient specific guidance or precautions regarding gasket or plenum orientation. The procedural deficiency was compounded by the lack of detailed information in the vendor manuals and a lack of knowledge on the part of plant personnel that the motor coolers were three-pass coolers instead of the assumed one-pass configuration.

Although the inoperability of the 1B SIP did not have a significant consequence to safety because it was not called upon to operate during this period, the violations are nonetheless of significant regulatory concern because an important emergency core cooling system (ECCS) component was inoperable for an extended period of time. Although your safety analysis indicates that the 1B SIP would have operated for approximately one-hour post-accident, it would have likely failed following that period due to motor bearing failure resulting in its unavailability for subsequent accident mitigation. The NRC also recognizes that the overall safety function was not lost in this case due to the availability of the 1A SIP. However, as you described at the conference, there were periods during the time in which the 1B SIP was inoperable that the 1A SIP was out of service for maintenance or testing; thus, the plant was operated for short periods of time in a condition which was prohibited by TS. Therefore, these violations are classified in the aggregate in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III problem. Because your facility has been the subject of escalated enforcement action within the last two years the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process described in Section VI.B.2 of the Enforcement Policy. The NRC concluded that credit was warranted for *Identification* because your staff identified the violations. The attentiveness and questioning attitude of the plant equipment operator responsible for identifying and pursuing temperature differences in the two motor coolers for the 1B SIP and the site engineer who identified the possibility of reversing the motor cooler plenums are particularly noteworthy. With regard to consideration for *Corrective Action*, at the conference you stated that your immediate and long term corrective actions included:

- (1) proper installation of the gasket and plenum on the 1B SIP; (2) inspection and correction of other ECCS motor coolers for reversed plenums;
- (3) development of a plant procedure which provides detailed instruction for correct disassembly and reassembly of motor coolers and revision of the existing maintenance checklist to reference the new procedural requirements;
- (4) inspection and correction of ACCW motor coolers plenum installation deficiencies; (5) training of maintenance personnel scheduled in January 1997 and continuing as part of the Continuing Training Program; (6) establishment of concurrent, dual verification of gasket and plenum installation; and
- (7) initiation of a review to determine the appropriate methodology for

periodic functional testing of heat exchangers. Based on the above, the NRC determined that your corrective actions were prompt and comprehensive, and credit was warranted for this factor.

Therefore, to encourage prompt identification and comprehensive corrective action for violations, I have been authorized, after consultation with the Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In addition, at the conference you stated that efforts have been initiated to determine the appropriate functional testing criteria for heat exchangers. Due to the importance of this effort in assuring future operability of heat exchangers for safety-related equipment, we request that your response include a detailed description and proposed schedule for your actions in this regard. The NRC will consider your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

Stewart D. Ebner
Regional Administrator

Docket Nos. 50-424, 50-425
License Nos. NPF-68, NPF-81

Enclosures: 1. Notice of Violation
2. Conference Attendees
3. NRC Slides
4. Licensee Presentation Material

cc w/encls:
J. D. Woodard
Senior Vice President
Georgia Power Company
P. O. Box 1295
Birmingham, AL 35201

cc w/encls: (Cont'd on Page 4)

cc w/encls (Cont'd):
J. B. Beasley
General Manager, Plant Vogtle
Georgia Power Company
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Waynesboro, GA 30830

J. A. Bailey
Manager-Licensing
Georgia Power Company
P. O. Box 1295
Birmingham, AL 35201

Jim Hurt, Director
Consumers' Utility Counsel Division
Governor's Office of Consumer Affairs
2 M. L. King, Jr. Drive
Plaza Level - East; Suite 356
Atlanta, GA 30334-4600

Office of Planning and Budget
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270 Washington Street, SW
Atlanta, GA 30334

Office of the County Commissioner
Burke County Commission
Waynesboro, GA 30830

Harold Reheis, Director
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Atlanta, GA 30334

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Attorney General
Law Department
132 Judicial Building
Atlanta, GA 30334

cc w/encls: (Cont'd on Page 5)

cc w/encls (Cont'd):
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Oglethorpe Power Corporation
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Municipal Electric Authority
of Georgia
1470 Riveredge Parkway NW
Atlanta, GA 30328-4684

NOTICE OF VIOLATION

Georgia Power Company
Vogtle Electric Generating Plant

Docket Nos. 50-424 and 50-425
License Nos. NPF-68, NPF-81
EA 96-479

During an NRC inspection conducted on September 29 through November 9, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. Technical Specification (TS) 3.5.2 Limiting Condition for Operation, Emergency Core Cooling System (ECCS) Subsystems - T_{ave} Greater than or Equal to 350 °F, requires that two independent ECCS subsystems be operable when in modes 1, 2, or 3. Each subsystem is comprised of one operable centrifugal charging pump, one operable safety injection pump, one operable residual heat removal heat exchanger, and one operable residual heat removal pump.

TS 3.5.2 Action Statement (a) requires that with one ECCS subsystem inoperable that the inoperable subsystem be restored to operable status within 72 hours or be in Hot Standby within the next six hours and in Hot Shutdown within the following 6 hours.

Contrary to the above, from at least September 30, 1991, through October 23, 1996, when Unit 1 was operated in modes 1, 2, and 3, the licensee failed to maintain two independent ECCS subsystems operable, and the provisions of TS 3.5.2 Action Statement (a) were not met. Specifically, the Unit 1, Train B safety injection pump (1B SIP) was inoperable due to blocked cooling flow to one of its motor coolers and approximately one-third flow to its other motor cooler. (01013)

- B. TS 6.7.1.a requires that written procedures be established covering activities delineated in Appendix A of Regulatory Guide 1.33, Revision 2, dated February 1978.

Regulatory Guide 1.33, Revision 2, dated February 1978, requires that procedures be written for performance of maintenance that can affect safety-related equipment.

Maintenance Procedure Checklist SCL022238, Nuclear Service Cooling Water Heat Exchangers - Periodic Inspections, Revision 8, dated September 29, 1995, provided general instructions to remove, replace, and re-install heat exchanger gaskets and plenums.

Contrary to the above, as of October 25, 1996, the licensee failed to establish adequate procedural guidance to assure the correct installation of motor cooler gaskets and plenums for safety-related equipment. As a result, the gasket for the 1B SIP inboard motor cooler was installed backwards and the plenum on the outboard motor cooler was reversed rendering the pump inoperable. Additionally, the plenums were

Enclosure 1

installed backwards on a Unit 2 Train A containment spray pump motor cooler, on a Unit 1 auxiliary component cooling water (ACCW) Pump 2 motor cooler, and on both Unit 2 ACCW Pump 1 motor coolers. (01023)

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

Pursuant to the provisions of 10 CFR 2.201, the Georgia Power Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the Vogtle Electric Generating Plant, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Atlanta, Georgia
this 31st day of December 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

December 5, 1996

EA 96-336

Mr. Michael McEnany, President
McEnany Roofing, Inc.
8803 Industrial Drive
Tampa, Florida 33637

SUBJECT: NOTICE OF VIOLATION
(Department of Labor Case No. 96-ERA-5)
(NRC Office of Investigations Case No. 2-95-27)

Dear Mr. McEnany:

On August 22, 1996, the presiding Administrative Law Judge (ALJ) issued a finding in U.S. Department of Labor (DOL) proceeding 96-ERA-5, James v. Pritts McEnany Roofing, Inc. The ALJ, in a Recommended Decision and Order (RDO), found that Ms. Tracy A. James was the subject of employment discrimination in October 1995 when your company, formerly known as Pritts-McEnany Roofing, Inc., terminated her for raising concerns about the failure of another employee of McEnany Roofing, Inc., to adhere to NRC security regulations at Florida Power Corporation's (FPC) Crystal River facility. The circumstances surrounding the apparent violation were also investigated by the NRC Office of Investigations (OI). OI found that Pritts McEnany Roofing, Inc., discriminated against Ms. James for engaging in protected activities.

The apparent violation, a copy of the ALJ's Recommended Decision and Order and the synopsis of the OI investigation were transmitted to you by letter dated October 8, 1996. A closed transcribed predecisional enforcement conference was held in the Region II office on October 22, 1996, to discuss the apparent violation, the root causes, and your corrective actions to preclude recurrence. The predecisional enforcement conference was a joint conference involving your company, McEnany Roofing, Inc.; you as the individual responsible for the discriminatory act; and, FPC. The report summarizing the conference was sent to you by letter dated November 8, 1996.

Based on the ALJ decision, the OI findings, and the information you provided during the conference, the NRC has determined that a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation (Notice). The violation involved discrimination against Ms. James by senior management. Under 10 CFR 50.7, discrimination by a contractor of a Commission licensee against an employee for engaging in protected activities protected by Section 211 of the Energy Reorganization Act (ERA) is prohibited. The activities which are protected include, but are not limited to, reporting of safety concerns by an employee to her employer.

While discrimination against any person for engaging in protected activities is cause for concern to the NRC, this violation is considered to be a very significant regulatory concern because it involved discrimination against an employee by senior contractor management. Therefore, this violation has been

categorized in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, at Severity Level II.

During the conference, it was your position that although Ms. James was terminated, you terminated her in the heat of the moment to address a business issue and did not terminate her in retaliation for raising safety concerns. After review of the information provided during the conference, we conclude that but for her engaging in protected activities she would not have been terminated. Therefore, the NRC adopts the ALJ's Recommended Decision and Order, as well as the OI conclusion, in this case and finds that the actions taken against Ms. James were in retaliation for her having raised safety concerns.

Therefore, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, to issue the enclosed Notice of Violation categorized at a Severity Level II to emphasize the importance of ensuring that employees who raise real or perceived safety concerns are not subject to discrimination for raising safety concerns and that every effort is made to provide an environment in which all employees may freely identify safety concerns without fear of retaliation or discrimination.

During the conference, you described those actions taken to address concerns about the implementation of the requirements of ERA Section 211. These included: (1) strengthening your policies with regard to ensuring employee concerns are promptly addressed and resolved; (2) training supervisors and employees with regard to their responsibilities in the area of employee protection; and, (3) discussions of employee rights with individual employees. As a contractor to Commission licensees, it is important that you, your supervisors and your employees fully understand that employees should be free to raise concerns and that discrimination will not be tolerated. Should discrimination be found in the future you may be subject to an Order prohibiting you and your company from engaging in activities at an NRC licensed facility.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In particular, your response should describe the basis for our confidence that, in the future, McEnany Roofing, Inc. will abide by the employee protection requirements of Section 211 of the Energy Reorganization Act and in 10 CFR 50.7. In addition, the NRC is concerned that the ongoing DOL proceeding could have a chilling effect on your employees. Therefore, please provide a written response describing the actions taken or planned to assure that the subject employment action will not have a chilling effect in discouraging other McEnany Roofing employees from raising real or perceived safety concerns related to activities at NRC licensed facilities. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR).

Should you have any questions concerning this Notice of Violation, please contact Mr. Bruno Uryc at (404) 331-5505 or Mr. Kerry Landis at (404) 331-5509. Collect calls will be accepted. You may also contact us by calling 1-800-577-8510.

Sincerely,

Stewart D. Ebnetter
Regional Administrator

Docket No.: 9999

Enclosure: Notice of Violation

cc w/encl:
Mr. P. M. Beard, Jr. (SA2A)
Sr. VP, Nuclear Operations
Florida Power Corporation
Crystal River Energy Complex
15760 West Power Line Street
Crystal River, Florida 34428-6708

Ms. Tracy James
7915 West Missy Place
Dunellen, Florida 34433

NOTICE OF VIOLATION

McEnany Roofing, Inc.
Tampa, Florida

Docket No. 9999
EA 96-336

As a result of review of a U.S. Department of Labor (DOL) Administrative Law Judge (ALJ) Recommended Decision and Order, dated August 22, 1996, and an investigation by the NRC's Office of Investigations (OI) completed on September 24, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

10 CFR 50.7 prohibits, in part, discrimination by a contractor of a Commission licensee against an employee for engaging in certain protected activities. Discrimination includes discharge or other actions relating to the compensation, terms, conditions, and privileges of employment. The activities which are protected include, but are not limited to, reporting of safety concerns by an employee to her employer.

Contrary to the above, McEnany Roofing, Inc., formerly known as Pritts McEnany Roofing, Inc., a contractor employed by Florida Power Corporation at the Crystal River Nuclear Plant, discriminated against Ms. Tracy A. James, a former security escort and firewatch. Specifically, as found by the DOL ALJ in Case No. 96-ERA-5 (August 22, 1996) and by OI in Case No. 2-95-027 (September 24, 1996), on October 11, 1995, Pritts McEnany Roofing, Inc., terminated the employment of Ms. James as a result of her reporting a violation of security escort requirements imposed at Florida Power Corporation's Crystal River Nuclear Plant pursuant to the Atomic Energy Act. (01011)

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

Pursuant to the provisions of 10 CFR 2.201, McEnany Roofing, Inc., is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at Crystal River, within 30 days of the date of the letter transmitting this Notice of Violation. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an Order or a Demand for Information may be issued. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Enclosure

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Atlanta, Georgia
this 5th day of December 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

September 30, 1996

EA 96-202

Guy R. Horn, Vice President - Nuclear
Nebraska Public Power District
1414 15th Street
Columbus, Nebraska 68601

SUBJECT: NOTICE OF VIOLATION (NRC Inspection Report 50-298/95-18 and
Investigation Case No. 4-96-002)

Dear Mr. Horn:

This refers to the matters discussed at the predecisional enforcement conference conducted on August 5, 1996, at the NRC's office in Arlington, Texas. As indicated in our letter dated June 27, 1996, the conference was conducted to discuss apparent violations related to a control rod mispositioning event that occurred on January 7, 1996, at the Cooper Nuclear Station (CNS). A summary of the predecisional enforcement conference, including the information presented by the Nebraska Public Power District (NPPD) at the conference, was issued on August 7, 1996. Subsequent to the conference with NPPD, the NRC also conducted individual conferences with two former CNS licensed operators who were involved in the rod mispositioning event.

Based on the information developed during the inspection and investigation, a review of NPPD's investigation of this matter, and the information obtained from the conferences, the NRC has determined that violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation (Notice). Each involves a failure by licensed operating personnel to follow procedural requirements, including: 1) a failure to insert control rods in the proper sequence following a loss of a reactor recirculation pump; 2) a failure to notify shift supervision of an unexpected situation, i.e., a mispositioned control rod, for approximately 20 minutes; and 3) a failure to obtain the concurrence of the shift supervisor and reactor engineer in developing a recovery plan for a mispositioned control rod.

This event began when the involved operators, after being directed to insert control rods in reverse sequence following a reactor recirculation pump trip, mistakenly inserted control rods on the wrong page of the control rod sequence book. The operators recognized their mistake but continued inserting control rods without notifying shift supervisory personnel of their error and without seeking concurrence in a recovery plan. This event was investigated by NPPD and resulted in NPPD terminating the involved licensed operators.

The NRC agrees with NPPD's expectation that the operators should have promptly informed shift supervisory personnel of their mistake and the abnormal conditions that developed. The information available to the NRC, however, does not support a conclusion that they intentionally violated any CNS procedural requirements. Although their actions

violated CNS procedures and NPPD management expectations, the operators appear to have been focused on inserting control rods to avoid exceeding plant administrative limits and an automatic plant trip. And, while they should have been mindful of the procedural requirements, they were not. The facts that they maintained accurate logs and informed the reactor engineer of the mistake when he approached the panel do not suggest a deliberate intent to cover up their mistake or violate procedures.

The NRC recognizes that the actions taken by the involved operators did not place the plant in an unsafe condition. Nonetheless, there is regulatory significance to licensed operators not recognizing their obligation to obtain shift supervisor and reactor engineer concurrence before proceeding to insert control rods in this situation. The NRC also attaches regulatory significance to the fact that the control room supervisor, despite being aware that the operators were inserting rods on the Emergency Control Rod Movement sheet, an unusual situation, did not take action to determine what was occurring and to understand the situation. As noted in NPPD's investigation of this matter, the control room supervisor's attention appears to have been focused heavily on balance-of-plant activities. While the NRC does not conclude that the control room supervisor's actions violated the Conduct of Operations procedures, an apparent violation discussed at the conference, this remains a concern. Finally, the NRC notes that NPPD's investigation team found inconsistent crew members' knowledge of the requirements of CNS procedure 10.13, "Control Rod Sequence and Movement Control," which calls into question the adequacy of CNS's training on the specific requirements of this procedure.

Based on the regulatory significance of these violations, they have been categorized in the aggregate in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III problem. In accordance with the Enforcement Policy, a civil penalty, with a base value of \$50,000, is considered for a Severity Level III problem. Because your facility has been the subject of escalated enforcement actions within the 2 years preceding the identification of this problem,¹ the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy.

These violations were identified as a result of the involved operators informing NPPD managers of their mistake, and NPPD's follow-up investigation into this matter. Thus, credit for identification is warranted. The NRC also has determined that NPPD is deserving of credit for its corrective actions, which consisted of: immediate actions to assure the safety of the facility and assure that thermal limits had not been exceeded; meetings with all operating crews to discuss issues arising from this event; initiation of an independent review team investigation; disciplinary action against the involved operators; clarification and revisions to procedures and Ops Instructions; and assessment of the environment for reporting errors.

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¹ For example, on December 12, 1994, a Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$300,000 was issued for three Severity Level III problems involving primary containment integrity, electrical buses, and the control room emergency filtration system (EAs 94-164, 94-165, 94-166).

Therefore, to encourage prompt identification and comprehensive correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

L.J. Callan
Regional Administrator

Docket No.: 50-298
License No.: DPR-46

Enclosure: Notice of Violation

cc w/Enclosure:
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Kansas Radiation Control Program Director

NOTICE OF VIOLATION

Nebraska Public Power District
Cooper Nuclear Station

Docket No. 50-298
License No. DPR-46
EA 96-202

During an NRC investigation concluded on May 8, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that, "Activities affecting quality shall be . . . accomplished in accordance with these instructions, procedures, and drawings."

Step 8.2.6 5 of Cooper Nuclear Station Operations Manual, "Conduct of Operations Procedure 2.0.3," Revision 20, dated August 21, 1995, states, "Operators should notify the control room supervisor and shift supervisor of any unexpected situations encountered in monitoring the main control boards."

Contrary to the above, on January 7, 1996, operators did not notify the control room supervisor and shift supervisor of a mispositioned control rod, an unexpected situation encountered in monitoring the main control boards, until approximately 20 minutes after discovery. (01013)

- B. 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that, "Activities affecting quality shall be . . . accomplished in accordance with these instructions, procedures, and drawings."

Step 8.1.5 of Cooper Nuclear Station Operations Manual, Nuclear Performance Procedure 10.13, "Control Rod Sequence and Movement Control," Revision 26, dated December 24, 1995, requires that operators, ". . . not deviate from the sequence unless approved by a reactor engineer (or shift supervisor in an emergency) or per a SORC approved procedure."

Contrary to the above, on January 7, 1996, operators deviated from the approved sequence when operators inserted control rods starting with the incorrect page of the control rod sequence book without the express permission of a reactor engineer or the shift supervisor, or a SORC approved procedure. (01023)

- C. 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that, "Activities affecting quality shall be . . . accomplished in accordance with these instructions, procedures, and drawings."

Step 8.4.4 of Cooper Nuclear Station Operations Manual, Nuclear Performance Procedure 10.13, "Control Rod Sequence and Movement Control," Revision 26, dated December 24, 1995, requires that operators, "With concurrence of the shift supervisor and reactor engineer, implement a recovery plan . . . ." when recovering from mispositioned control rods.

Contrary to the above, on January 7, 1996, operators failed to properly implement this procedure when the control room operators took actions to recover from mispositioned control rods using their own judgement rather than a recovery plan which had been concurred in by the shift supervisor and the reactor engineer.
(01033)

These violations represent a Severity Level III problem (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, Nebraska Public Power District is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Arlington, Texas
this 30th day of September 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

November 20, 1996

EA 96-307

G. R. Horn, Senior Vice President
of Energy Supply
Nebraska Public Power District
1414 15th Street
Columbus, Nebraska 68601

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report Nos. 50-298/96-18 and 96-02)

Dear Mr. Horn:

This refers to your letter dated October 25, 1996, in which you replied to our letter and NRC Inspection Report 50-298/96-18 dated September 18, 1996. The inspection report described eight apparent violations of access authorization requirements at Cooper Nuclear Station (Cooper), most of which had been identified by NPPD following a change in management of the security program in late 1995. Our letter indicated that the NRC was considering escalated enforcement action and provided the Nebraska Public Power District (NPPD) with the option of responding in writing or requesting a predecisional enforcement conference. NPPD provided a written response to the apparent violations in its letter dated October 25, 1996.

In its response, NPPD admitted the apparent violations, but stated that some appeared to be deviations from regulatory guidance contained in NRC Regulatory Guide 5.66 rather than violations of requirements. NPPD also noted that all but two of the violations were self-identified, and that NPPD was in compliance with the involved requirements at the time the inspection (96-18) was conducted. NPPD described numerous corrective actions, including: consolidation of the security program under the Nuclear Power Group to increase oversight and control; revisions to Cooper's security procedures to remedy the cited deficiencies; retraining of the access authorization staff; and a review of active access files to assure that unescorted access was based on appropriate information and that required information was in each file. Finally, NPPD acknowledged that a deficient access authorization program existed, but noted that aggressive steps were taken to assess and correct all deficiencies. As noted in NRC's inspection report, there was a complete turnover in the access authorization staff since the discovery of these violations in late 1995.

Based on the information developed during the inspection and the information that you provided in your response to the inspection report, the NRC has determined that violations of NRC requirements did occur. These violations are cited in the enclosed Notice of Violation (Notice). The circumstances surrounding them were described in detail in the subject inspection report. With regard to NPPD's position that some of the apparent violations appeared to be deviations from regulatory guidance, and not violations, the NRC

notes that NRC Regulatory Guides are enforceable if they are referenced or contained in a license or other legally binding requirement. In this case, NRC License DPR-46 states that NPPD will fully implement all provisions of the NRC-approved Security Plan for the Cooper Nuclear Station. The Security Plan commits NPPD to implementing all elements of Regulatory Guide 5.66. Thus, the guidance contained in Regulatory Guide 5.66 is considered by the NRC to be legally binding on NPPD and deviations from Regulatory Guide 5.66 are considered violations of requirements.

The enclosed violations involved several past failures to implement requirements related to granting access to Cooper, including: 1) multiple failures to consider criminal history information; 2) multiple failures to develop references for applicants, including a willful failure on the part of a former Cooper access authorization technician to develop references in two cases; 3) multiple failures to review military background information; 4) multiple failures to document interviews of applicants when derogatory information was discovered; 5) multiple failures to verify activities during periods of unemployment; 6) multiple failures to conduct complete background investigations when "updating" access; 7) two failures to complete full background investigations after granting temporary access. In addition to these past failures, one current violation was discovered, involving a vulnerability in the badging process for individual access authorization.

The NRC acknowledges that most of the violations were discovered in late 1995 and early 1996 following a change in management of the security program at Cooper, and were corrected by NPPD prior to the NRC's inspection (96-18). Nonetheless, these violations indicate that for an extended period of time prior to late 1995, Cooper's access authorization program was barely functional in several areas. This appears to have been caused by inadequate or non-existent management of this program. While the NRC does not have information indicating that the violations resulted in granting unescorted access to individuals who should not have been permitted access to Cooper, the program was being run in a manner that significantly increased the likelihood of that occurring. The manner in which the access authorization program was being run was contrary to the objective in 10 CFR 73.56 of providing high assurance that unescorted access be granted only to individuals who are reliable and trustworthy. Therefore, these violations are classified in the aggregate in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III problem.

In accordance with the Enforcement Policy, a civil penalty with a base value of \$50,000 is considered for a Severity Level III problem. Because your facility has been the subject of escalated enforcement actions within the 2 years preceding the discovery of this problem in late 1995 and early 1996¹, the NRC considered whether credit was warranted for Identification and Corrective Action in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. The NRC determined that credit was warranted for both: Cooper security management identified most of the violations and, as

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¹ For example, on December 12, 1994, a Notice of Violation and Proposed Imposition of Civil Penalties in the amount of \$300,000 was issued for three Severity Level III problems involving primary containment integrity, electrical buses, and the control room emergency filtration system (EAs 94-164, 94-165, 94-166).

discussed above, initiated prompt and comprehensive corrective action. While Section VII.A.1 of the NRC's Enforcement Policy states that the NRC may increase sanctions for violations involving particularly poor licensee performance, regardless of the Identification and Corrective Action factors, the NRC has decided not to assess a civil penalty based on the specific circumstances of this case. As NPPD stated in its October 25 letter, these problems were identified as the result of "positive action to aggressively self-identify, correct and improve" the access authorization program.

Therefore, to recognize and encourage self-identification and prompt and comprehensive correction of violations, I have been authorized after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation without a civil penalty in this case. However, NPPD is reminded and cautioned that significant violations in this program area in the future could result in a civil penalty.

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in Inspection Report No. 50-298/96-18, and NPPD's October 25, 1996 letter. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and any response you choose to submit will be placed in the NRC Public Document Room (PDR).

Sincerely,

L. J. Callan
Regional Administrator

Enclosure: Notice of Violation

Docket No.: 50-298
License No.: DPR-46

cc w/Enclosure:

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Columbus, Nebraska 68602-0499

Nebraska Public Power District

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Nebraska Public Power District

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Department of Natural Resources
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NOTICE OF VIOLATION

Nebraska Public Power District
Cooper Nuclear Station

Docket No. 50-298
License No. DPR-46
EA 96-307

During an NRC inspection conducted from July 29, 1996 to August 2, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

NRC License DPR-46 states, in part, that NPPD will fully implement and maintain in effect all provisions of the Commission-approved Security Plan for the Cooper Nuclear Station, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p).

Paragraph 1.2.1 of the Cooper Nuclear Station Physical Security Plan states, "Effective April 27, 1992, Nebraska Public Power District will adhere to the provisions of 10 CFR 73.56, "Personnel Access Authorization Requirements For Nuclear Power Plants." All elements of Regulatory Guide 5.66 will be implemented to satisfy the requirements of 10 CFR 73.56."

- A. Paragraph 6.2.3 of Regulatory Guide 5.66 states, in part, that the utility shall perform a criminal history record check that includes the entire criminal history record of the individual as an adult. Paragraph 7.1 states, in part, that in making a determination of trustworthiness or reliability, that a criminal history without adequate evidence of rehabilitation must be considered. It further requires consideration of willful omission or falsification of material information submitted in support of employment or request for unescorted access.

Contrary to the above, during the latter part of 1995 or early 1996, the licensee identified approximately 10 individuals who had been granted unescorted access without a criminal history being completed. Further, approximately another 10 files contained criminal history that was not reported in the personal history questionnaires and the licensee staff did not review the information to determine if the information was willfully omitted or falsified in the criminal history portion of the personnel history questionnaire. (01013)

- B. Paragraph 6.2.5 of Regulatory Guide 5.66 states, in part, that the applicant's reputation for emotional stability, reliability and trustworthiness must be examined through contact with two references supplied by the applicant and at least two additional references (not related to the applicant) developed during the background investigation.

Paragraph 6.4.8 of the licensee's Procedure AAPP 3.3, "Background Investigations", states, "A total of four character and reputation references shall be contacted during the conduction of the BI. Two of the references shall be developed (not provided by the SUBJECT)."

Contrary to the above, during an outage conducted in late 1995, a licensee Access Authorization Program Technician wilfully directed two contractor Access Authorization Program Technicians to use references provided by applicants as developed references. (01023)

- C. Paragraph 6.2.4 of Regulatory Guide 5.66 states, in part, that military period of service within five years of an applicant requesting unescorted access must be verified by receipt of a Department of Defense (DD) Form 214 or other National Personnel Records Center (NPRC) records. The utility may grant unescorted access for 180 days or less prior to receipt of such records if all other applicable elements of the guidelines are met and a record is maintained which documents that the request for military history was submitted within 10 working days of granting the unescorted access.

Contrary to the above, during the latter part of 1995 or early 1996, the licensee identified approximately 5 persons who had been granted unescorted access without verifying the applicable military history of the individuals. In one case, the request for military records was not submitted within 10 days after temporary access was granted. (01033)

- D. Paragraph 6.6.1, of Cooper Nuclear Station Procedure AAAP3.3, Revision 1, requires, in part, that the results of the investigation be documented in a formal report of investigation. Paragraph 6.5.1 of Procedure AAAP3.3, Revision 1, states, in part, that if derogatory information is developed, a non-accusatory interview will be conducted.

Contrary to the above, during the latter part of 1995 or early 1996, the licensee identified that between 1993 and 1995: 1) numerous background investigation files did not contain a formal report of investigation; and 2) in several cases, no interviews had been conducted even when derogatory information was discovered during the background investigation. (01043)

- E. Paragraph 6.2.1 of Regulatory Guide 5.66 states, in part, that activities during interruptions of employment in excess of 30 days must be verified.

Paragraph 6.4.5 of the licensee's procedure AAPP 3.3, "Background Investigations", requires that employment interruptions in excess of 30 days will be verified and activities during that period will be determined.

Contrary to the above, during the latter part of 1995 or early 1996, the licensee identified numerous files in which activities during periods of unemployment in excess of 30 days were not verified. (01053)

- F. Paragraph 8.3 of Regulatory Guide 5.66 states, in part, that a utility shall not authorize unescorted access where the individual's unescorted access has been interrupted for more than 365 calendar days unless the psychological evaluation and the background investigation is updated to cover the individual's activities from the

date of the previous background investigation, not to exceed retrospective periods in Section 6.2 or to the period when unescorted access last held, whichever is less.

Paragraph 6.2.3 of Regulatory Guide 5.66 states, in part, that the utility shall perform a criminal history record check that includes the entire criminal history record of the individual as an adult. Paragraph 6.2.5 of Regulatory Guide 5.66 states, in part, that the applicant's reputation for emotional stability, reliability and trustworthiness must be examined through contact with two references supplied by the applicant and at least two additional references (not related to the applicant) developed during the background investigation.

Contrary to the above, during the latter part of 1995 or early 1996, the licensee identified that update background investigations included only one listed reference and one developed reference. In addition, the updated background investigations did not include a review of criminal history information. (O1063)

- G. Regulatory Guide 5.66, Clarification to the Guidelines, paragraph 2, states that the NUMARC Guidelines provide for temporary access authorization for 180 uninterrupted days. Any longer access authorization is not temporary. Using this provision to allow back-to-back temporary access authorizations for an individual by the licensee would be a misuse of this provision.

Paragraph 6.2.2 of Cooper Nuclear Station Procedure AAAP3.3, Revision 1, states, in part, that "once a temporary background clearance has been completed, the expanded background clearance must be completed within 180 days."

Contrary to the above, during a 1995 outage, the licensee granted back-to-back temporary unescorted access to two individuals without completing the full background investigations. (O1073)

- H. Section 10.2 of the licensee's physical security plan states, in part, that the security program meets the general performance requirements of 10 CFR 73.55(a).

10 CFR 73.55(a) requires, in part, that the licensee's physical protection system be designed to protect against the design basis threat of radiological sabotage as stated in 10 CFR 73.1(a).

10 CFR 73.1(a) states, in part, that the design basis threat of radiological sabotage at plants is a determined violent external assault on the plant by several well trained persons, with inside assistance from a knowledgeable individual (insider), participating in an active role (e.g., facilitating entrance and exit).

Contrary to the above, as of July 30, 1996, the licensee's physical protection system was not adequately designed to protect against the single insider in the design basis threat of radiological sabotage. Specifically, the licensee's system afforded each of two supervisors (insiders) the opportunity to actively facilitate entrance and exit to the plant to unauthorized persons, by allowing these supervisors (insiders) the opportunity to fabricate unauthorized photo identification

Notice of Violation

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security badges and the opportunity to approve bogus unverified access authorization data for entry into the security computer. (01083)

These violations represent a Severity Level III problem (Supplement III).

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance was achieved, is already adequately addressed on the docket in Inspection Report No. 50-298/96-18 and NPPD's letter dated October 25, 1996. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at Cooper Nuclear Station, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

Dated at Arlington, Texas
this 20th day of November 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

July 31, 1996

EA 96-204

T. L. Patterson, Division Manager
Nuclear Operations
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 399, Hwy. 75 - North of Fort Calhoun
Fort Calhoun, Nebraska 68023-0399

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report No. 50-285/96-05)

Dear Mr. Patterson:

This refers to the predecisional enforcement conference held on July 22, 1996, in the NRC Region IV office in Arlington, Texas. The purpose of the conference was to discuss the apparent violations identified in the subject inspection report involving operator actions which disabled the Low Temperature Overpressure Protection (LTOP) function of the Pressurizer Power Operated Relief Valves (PORVs). The LTOP function is provided to protect the reactor vessel from brittle fracture when at low temperatures. The inspection report identified three apparent violations: (1) providing inadequate procedural guidance for pressurizer cooldown evolutions, (2) failing to follow procedures by not taking adequate compensatory measures for disabling the LTOP function, and (3) failing to follow procedures by not logging abnormal plant conditions and by not conducting proper shift turnovers.

Based on the information developed during the inspection and the information that you provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and the circumstances surrounding them are described in detail in the subject inspection report. In summary, the violations were identified after plant operations staff recognized that they had disabled the LTOP function on several occasions during pressurizer cooldown on March 18, 1996. Plant procedures had called for cooling down the pressurizer by, among other actions, cycling the PORVs. Although the procedure was specific in requiring that PORVs be opened by pulling, and thus disconnecting, two reactor protection system (RPS) pressurizer pressure trip units, the procedure was not specific in discussing how the PORVs would be closed. During the cooldown evolution on March 18, operators closed the PORVs by manually switching the PORV hand control switches from AUTO to CLOSE without reinstalling the RPS pressurizer pressure trip units. This disabled the LTOP function.

The PORVs were cycled over a period of two shifts, without the operations staff recognizing that LTOP had been disabled and that it remained disabled after the cooldown evolution had been completed. During the subsequent

afternoon shift, operators did not notice that the pressurizer pressure trip units were disconnected (pulled out) nor that the associated annunciator lights were lit. Evaluation of the issue indicated that there was inadequate supervision and oversight, inadequate procedures, inadequate shift turnover from the day shift to the afternoon shift, a lack of a questioning attitude, inadequate logkeeping, training deficiencies, and weaknesses in the plant's initial review of the event.

In reviewing the safety significance of the issues, we noted that the actual and potential safety significance of this problem were limited by design features of the system and by the fact that operations staff had used a dedicated operator to oversee pressurizer cooldown. (It is important to note the distinction that the dedicated operator was not assigned to manually perform the necessary actions to restore LTOP in the event it was needed and was not fully cognizant that the LTOP function had been disabled.) However, the number and fundamental nature of the issues identified collectively represent a potentially significant lack of attention toward licensed responsibilities. Therefore, these violations are classified in the aggregate in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III problem. Because your facility has not been the subject of escalated enforcement actions within the last 2 years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. The NRC evaluated your short term and longer term corrective actions, in addition to the adequacy of the root cause analysis. Although there were deficiencies in the initial root cause analysis, which NRC inspectors later discussed with plant management, these deficiencies did not provide a sufficient basis for denying corrective action credit. As a result, the NRC staff concluded that credit for the Corrective Action factor was warranted. After discussions with NRC inspectors, plant personnel re-evaluated the event and improved the initial root cause analysis and the corrective actions. The corrective actions included revising the applicable procedure, training on the procedure, crew briefings by the shift supervisor, discussing the event and the root causes with all crews, conducting refresher training on LTOP/PORV circuitry, emphasizing the importance of questioning attitude and quality procedure verifications, better defining the purpose and expectations of a dedicated operator, reemphasizing management expectations for logkeeping and shift turnover, and improving the formality of shift turnovers, board walkdowns, and annunciator responses. Longer term corrective actions included further procedure revisions, upgrading the PORV control switches, and evaluating the potential for unique marking of normally lit annunciators during shutdowns and out-of-normal switch positions.

Therefore, in recognition of the absence of escalated enforcement action within 2 years and of your comprehensive corrective actions, I have been

authorized not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

L. J. Callan
Regional Administrator

Docket No. 50-285
License No. DPR-40

Enclosure: Notice of Violation

cc w/enclosure:
Mr. James R. Curtiss
Winston & Strawn
1400 L. Street, N.W.
Washington, D.C. 20005-3502

Jack Jensen, Chairman
Washington County Board of Supervisors
Blair, Nebraska 68008

Cheryl Rogers, LLRW Program Manager
Environmental Protection Section
Nebraska Department of Health
301 Centennial Mall, South
P.O. Box 95007
Lincoln, Nebraska 68509-5007

Dr. Mark B. Horton, M.S.P.H.
Director
Nebraska Department of Health
P.O. Box 950070
Lincoln, Nebraska 68509-5007

James W. Chase, Manager
Fort Calhoun Station
P.O. Box 399
Fort Calhoun, Nebraska 68023

NOTICE OF VIOLATION

Omaha Public Power District
Fort Calhoun Station

Docket No. 50-285
License No. DPR-40
EA 96-204

During an NRC inspection conducted on May 20 through June 13, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG 1600, the violations are listed below:

- A. Technical Specification 5.8.1 states, in part, that written procedures and administrative policies shall be established and implemented that meet or exceed the minimum requirements of Appendix A of Regulatory Guide 1.33. Regulatory Guide 1.33, Appendix A, Section 1.j, requires procedures for the bypass of safety functions.

Procedure SO-G-100, "Operability Dispositions When Calibrating or Testing Safety Related Equipment," Revision 1, provides procedural requirements for the bypass of safety functions. Specifically, when safety related equipment is configured such that without manual operator action the equipment would be unable to perform its intended design function, procedure requirements include: (a) declaring the piece of equipment inoperable, (b) rescheduling to such a time when the limiting conditions for operation (LCO) action statement or safety system would not be challenged, (c) reconfiguring such that the equipment is not impaired, the LCO action statement is not entered and/or the safety systems are not challenged, or (d) changing the activity to incorporate the use of a dedicated operator to take manual actions to fulfill the automatic action.

Contrary to the above, on March 18, 1996, the licensee failed to implement Procedure SO-G-100 by taking no actions when safety related equipment, specifically the reactor protection system (RPS) pressurizer pressure trip units and the pressurizer power operated relief valves (PORVs), were configured such that without manual operator action the equipment would have been unable to perform its intended design function. Specifically, the RPS pressurizer pressure trip units were disconnected (pulled) and the hand switches for the pressurizer PORVs were moved to the CLOSE position, disabling the low temperature overpressure protection (LTOP) function, and none of the required actions were taken. (01013)

- B. Technical Specification 5.8.1 states, in part, that written procedures and administrative policies shall be implemented that meet or exceed the minimum requirements of Appendix A of Regulatory Guide 1.33. Regulatory Guide 1.33, Appendix A, Sections 1.g and 1.h, require procedures for shift and relief turnover and log entries.

Procedure SO-O-1, "Conduct of Operations," Revision 29, provides procedural requirements for the conduct of shift and relief turnover and log entries. Those requirements include: (1) the oncoming shift shall

familiarize themselves with the conditions in areas to which they are responsible; (2) each person will brief his/her relief on the condition and status of that portion of the plant to which he/she is assigned, including abnormal conditions or alignments and inoperable equipment; (3) prior to assuming the shift, each operator shall personally verify the status of important system operating parameters, especially those relating to safety systems; and (4) log entries into the official control room log shall be made when major equipment/systems placed in or out of operation.

Contrary to the above, on March 18, 1996, the licensee failed to implement Procedure SO-O-1 with regard to the disabling of the LTOP function when the PORV hand switches were moved to the CLOSE position and the RPS pressurizer pressure trip units were disconnected. Specifically, (1) the appropriate oncoming (afternoon) shift operators did not familiarize themselves with the conditions regarding the LTOP functional status; (2) the appropriate (day shift) operators did not brief his/her reliefs on the condition and (inoperable) status of the LTOP function; (3) prior to assuming the afternoon shift, the appropriate operators did not adequately verify the status of important safety systems, specifically the RPS pressurizer pressure trip units and the pressurizer PORV hand switch positions; and (4) log entries into the official control room log were not made each time major equipment/systems (charging pumps and PORV hand switches) were placed in or out of operation. (01023)

- C. Technical Specification 5.8.1 states, in part, that written procedures shall be established that meet or exceed the minimum requirements of Appendix A of Regulatory Guide 1.33. Regulatory Guide 1.33, Appendix A, Sections 3.a and 3.u, require procedures for startup, operation, and shutdown of safety related systems, specifically the reactor coolant system and the reactor protection system.

Contrary to the above, on March 18, 1996, adequate procedures were not provided for the operation and shutdown of safety related equipment affecting the LTOP function, part of the reactor protection system. Specifically, Procedure OI-RC-4A, Attachment 1, "Pressurizer Cooldown," Revision 1, did not provide adequate guidance to prevent the disabling of the LTOP function of the pressurizer PORVs without taking appropriate compensatory measures, nor did the procedure provide guidance to ensure system restoration to an operable status following the completion of pressurizer cooldown. (01033)

These violations represent a Severity Level III problem. (Supplement I)

Pursuant to the provisions of 10 CFR 2.201, Omaha Public Power District (Licensee) is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, 611 Ryan

Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Because the response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if it necessary to include such information, it should clearly indicate the specific information that should not be placed in the PDR, and provide the legal basis to support the request for withholding the information from the public.

Dated at Arlington, Texas
this 31st day of July 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

October 17, 1996

EA 96-209

Mr. D. M. Smith, President
PECO Nuclear
Nuclear Group Headquarters
Correspondence Control Desk
Post Office Box 195
Wayne, Pennsylvania 19087-0195

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report Nos. 50-352/96-04; 50-353/96-04)

Dear Mr. Smith:

This letter refers to the NRC inspection conducted from May 7 through July 1, 1996, at your Limerick Generating Station facility. The findings of the inspection were discussed with your staff during an exit meeting on July 3, 1996. During the inspection, the inspectors reviewed the circumstances surrounding the substantial accumulation of debris on the Unit 1 "A" RHR pump suppression pool suction strainer which had been identified by your staff after an inadvertent actuation of a Unit 1 safety relief valve (SRV) that had opened and caused the reactor coolant system to depressurize on September 11, 1995. Approximately 30 minutes after the event, an RHR pump, which had been operating in the suppression pool cooling mode of operation, showed signs of cavitation. Subsequent underwater inspection indicated that the cavitation was caused by a collection of fibrous material and corrosion products on the pump's suction strainers.

Based on a review of the event and its associated causes, a violation of NRC requirements was identified involving the failure to establish adequate controls for excluding foreign material from the Unit 1 suppression pool. The violation was described in the NRC inspection report sent to you with our letter, dated July 30, 1996. In that letter, you were informed that this apparent violation was being considered for escalated enforcement and that a predecisional enforcement conference may not be necessary in order for the NRC to make an enforcement decision. In your response, dated August 29, 1996, you agreed that a conference was not needed and you described your corrective actions in that response.

The violation, which is also set forth in the enclosed Notice of Violation, involved the failure to comply with 10 CFR Part 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," which requires that activities affecting quality shall be prescribed by documented instructions, procedures or drawings of a type appropriate to the circumstances. Prior to the SRV actuation on September 11, 1995, you had not established an effective instruction for a foreign materials exclusion (FME) program to ensure that the suppression pool did not contain materials which could clog the ECCS suction strainers. Specifically, the FME procedure for the suppression pool did not contain adequate cleanliness acceptance criteria, and did not provide adequate instructions on how to assess the effects of items dropped into the suppression pool. As a result, after the SRV opened on September 11, 1995, the A RHR pump was considered

inoperable due to the accumulation of debris on its suppression pool suction strainers. Therefore, this violation has been categorized at Severity Level III in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," (Enforcement Policy), NUREG-1600.

During your follow-up of the event, you noted that there was debris on the B RHR strainer, but to a lesser extent, and that the remaining ECCS suction strainers were essentially clean. You attributed the substantial accumulation of debris on the A RHR strainer to the significant period of time the pump had been operated in the suppression pool cooling mode of operation, compared to a much lower run time in that mode for the B RHR pump. You also concluded that the remaining ECCS strainers were essentially clean since they were operated infrequently. Notwithstanding your contentions, the A RHR pump was significantly degraded, and the RHR system could have been inoperable or in a degraded condition for an extended period because of such debris. In addition, debris on the A suction strainer may have been due to the fact that the majority of the blowdown occurred in the vicinity of this strainer, and not due to the length of time the A system operated.

In either case, the NRC is concerned that PECO Energy was unaware that debris had accumulated in the Unit 1 suppression pool water or the suction strainers due to the inadequate Foreign Material Exclusion (FME) program and plant housekeeping programs and procedures. Although debris was found in the Unit 2 suppression pool by your staff in February 1995, and Unit 2 was cleaned following that discovery, you were not proactive in aggressively pursuing at that time whether a similar condition existed at Unit 1. In fact, you did not perform inspection of the Unit 1 suppression pool during two maintenance outages that followed the Unit 2 suppression pool cleaning to determine if foreign material existed in the Unit 1 suppression pool.

These findings demonstrate the importance of management taking appropriate action to assure that (1) the Foreign Material Exclusion Program is appropriately implemented, and (2) your staff is proactive in evaluating adverse conditions identified at one unit to ensure degraded conditions do not exist at the other unit. It may have been fortuitous that only a limited amount of debris had collected on the other ECCS suction strainers at Unit 1. Additional debris, or lifting of other SRVs, may have rendered other systems inoperable.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has not been the subject of escalated enforcement actions within the last 2 years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit is warranted because your corrective actions were both prompt and comprehensive. Your corrective actions included, but were not limited to, the following: (1) cleaning the Unit 1 suppression pool; (2) testing of RHR pumps and declaring them operable prior to start-up; (3) implementing a program to monitor the differential pressure of the Suppression Pool suction strainers; (4) initiating FME accountability tracking during unit outages for Suppression Pool and Primary Containment; (5) sampling and trending suppression pool water for fibrous content on a monthly basis; and, (6) providing training to planner supervisors and lead technicians on the importance of FME controls for work in the drywell and suppression pool.

Therefore, to encourage prompt and comprehensive correction of violations, and in recognition of the absence of previous escalated enforcement action, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, it is important that you clearly understand that any future performance problems, especially involving missed opportunities to aggressively pursue a condition adverse to quality, could result in more significant enforcement action and civil penalties.

The NRC has concluded that the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved, are already adequately addressed on the docket in LER 95-008, and your letters dated October 6, 1995, November 16, 1995, March 1, 1996, June 10, 1996, and August 29, 1996. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

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

Sincerely,

Hubert J. Miller
Regional Administrator

Docket Nos. 50-352, 50-353
License Nos. NPF-39, NPF-85

Enclosure: Notice of Violation

ENCLOSURE

NOTICE OF VIOLATION

PECO Energy
Limerick Generating Station
Unit 1

Docket No. 50-352
License No. NPF-39
EA 96-209

During an NRC inspection conducted between May 7 and July 1, 1996, for which an exit meeting was held on July 3, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the particular violation and associated civil penalty is set forth below:

10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedures or drawings of a type appropriate to the circumstances.

Contrary to the above, as of September 11, 1995, activities affecting quality were not prescribed by documented instructions, procedures or drawings of a type appropriate to the circumstances in that effective instructions had not been established for a foreign materials exclusion (FME) program to ensure that the suppression pool did not contain materials which could clog the ECCS suction strainers. Specifically, FME procedures for the suppression pool did not contain adequate cleanliness acceptance criteria, and did not provide adequate instructions on how to assess the effects of items dropped into the suppression pool. For example,

1. Procedure A-30, "Housekeeping Requirements," stated that if debris was dropped into the suppression pool and not recovered, it was the responsibility of the work group, who dropped the item, to disposition the issue; however, the procedure did not contain criteria that should be considered if material remained in the suppression pool;
2. Procedures A-30, as well as Procedure A-C-131, "Foreign Material Exclusion," also did not require personnel to track dropped, unrecovered items in the suppression pool in a deficiency tracking system; and
3. Procedure A-30 contained vague acceptance criteria for suppression pool cleanliness requirements in that although the procedure required personnel to inspect the suppression pool prior to plant startup and ensure no foreign material was in the water, the procedure did not contain qualitative or quantitative suppression pool water cleanliness acceptance criteria.

As a result, on September 11, 1995, after a safety relief valve opened and caused the reactor coolant system to depressurize, the A RHR pump was inoperable due to the accumulation of debris on its suppression pool suction strainer. (IFS 01013)

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

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in LER 95-008, and letters from the Licensee dated October 6, 1995, November 16, 1995, March 1, 1996, June 10, 1996, and August 29, 1996. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region I, and a copy to the NRC Senior Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

Dated at King of Prussia, Pennsylvania
this 17th day of October 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

September 19, 1996

EA 96-134
EA 96-137

David R. Hyster
Vice President, Nuclear Services
Raytheon Engineers and Constructors, Inc.
Post Office Box 8223
30 South 17th Street
Philadelphia, Pennsylvania 19101-8223

SUBJECT: NOTICE OF VIOLATION
(DOL CASE NO. 95-ERA-004)

Dear Mr. Hyster:

This refers to the matters discussed at the predecisional enforcement conference conducted on July 19, 1996, in the NRC's Arlington, Texas office. As discussed in the NRC's June 19, 1996 letter to Raytheon, the conference was conducted to discuss two apparent violations of NRC requirements barring discrimination against employees who engage in protected activities, i.e., 10 CFR 50.7. Each apparent violation involved Houston Lighting & Power Company (HL&P) contractors -- Ebasco Services, Inc. (Ebasco) or Raytheon Engineers and Constructors, Inc. (Raytheon) -- discriminating against employees at HL&P's South Texas Project Electric Generating Station (STP). A letter documenting the conference, including the outline from HL&P and Raytheon's conference presentation, was sent to HL&P and placed in the NRC's Public Document Room (PDR) on July 31, 1996. The transcript of the conference also has been placed in the PDR.

Both apparent violations were based on adjudicatory determinations of the U.S. Department of Labor (DOL). As indicated in our June 19 letter, the NRC normally relies on such determinations in deciding whether violations of NRC requirements occurred. Thus, based on the decisions by DOL in these cases, and in the absence of compelling evidence to the contrary, the NRC has determined that violations of 10 CFR 50.7 occurred. As a result, the NRC is issuing to HL&P a Notice of Violation and Proposed Imposition of Civil Penalties (Notice) in the amount of \$200,000. That Notice is being distributed to the same distribution list, so you will receive a copy.

With regard to the action against Raytheon, the NRC recognizes that Raytheon was a respondent in only one of the two DOL cases discussed at the conference, that involving Earl V. Keene. Nonetheless, it was appropriate for Raytheon to address both issues at the conference because Raytheon purchased the contracts previously held by Ebasco, the respondent in the case involving Mr. Thomas H. Smith, and became the employer of the individuals who were involved in the issues involving Mr. Smith. In that respect, Raytheon assumed a responsibility for corrective actions even in the Smith case. Notwithstanding that responsibility, the NRC has determined not to issue a

citation to Raytheon for the violation involving Mr. Smith. Thus, the only violation described in the enclosed Notice of Violation is that associated with Mr. Keene.

The violation (EA 96-137) is based on a DOL proceeding (95-ERA-004) in which the presiding ALJ, in a Recommended Decision and Order issued September 29, 1995, found that Mr. Keene was subjected to discriminatory treatment in 1994 after he raised concerns about signing off for electrical maintenance work he did not perform. The discriminatory treatment in Mr. Keene's case consisted of his inclusion in a March 24, 1994 reduction in force, his receiving a lower performance appraisal rating, and his having been subjected to fitness-for-duty testing on May 24, 1994 when he returned to the STP facility with another individual who was completing documentation related to pending employment. At the time of the discriminatory treatment, Mr. Keene was an employee of Raytheon. Raytheon personnel at the conference noted their disagreement with the ALJ's findings and indicated a brief has been filed with the SOL describing their bases for their disagreement. The DOL's Administrative Review Board, which has been authorized to decide these cases for the Secretary of Labor, has not issued a final decision in this case.

In addition to the potential for violations of this type to have an effect on safety, this violation is significant from a regulatory perspective as well. In the case involving Mr. Keene, it is significant that the discriminatory treatment of Mr. Keene occurred in 1994, after HL&P had initiated efforts to address the environment at STP for raising concerns, including actions that were specifically addressed to contractors and their supervisors. Thus, this violation has been classified at Severity Level III in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600. Despite this violation having occurred in 1994, it is important because, absent prompt and decisive corrective action, such violations can have a chilling effect on the willingness of other employees to raise concerns to their employer or to the NRC.

The NRC acknowledges the actions taken by Raytheon to address the environment for raising concerns at STP. These corrective actions were summarized in the documentation of HL&P and Raytheon's conference presentation which, as indicated above, has been placed in the NRC's Public Document Room. In brief, HL&P and Raytheon described numerous actions taken to improve the STP employee concerns program and to assure that all STP employees are encouraged to raise concerns without fear of retaliation. However, despite HL&P and Raytheon's response to these specific instances of discrimination, as of the date of the conference no corrective actions were described that would foster a sense of individual accountability for this objectionable behavior. For example, when asked at the conference whether the supervisors who were involved in these matters were counseled, the answer from Raytheon was that there had been no action to conduct individual counseling. While it is not the NRC's role to specify what action would have been appropriate, clearly some action should have been taken to assure that the individuals involved in these matters understand the protections afforded employees by law, the significance of

violating such protections, and the possible consequences of doing so. Although the NRC understands that following the conference, steps were taken to ensure that the Raytheon supervisors involved in the discriminatory acts had been counseled, this fundamental corrective action should have been taken much earlier. The delay in counseling the supervisors gains additional regulatory significance because the delay may have created, or perpetuated, the perception among other employees that you were not serious about preventing these types of violations from occurring and may have detracted from your otherwise comprehensive actions to address these matters. This apparent lack of accountability was a factor in assessing the civil penalties against HL&P.

Therefore, to emphasize the importance of protecting individuals against discrimination and taking comprehensive corrective action that includes establishing accountability for violations of 10 CFR 50.7, I have been authorized to issue the enclosed Notice of Violation to Raytheon for the Severity Level III violation described above.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

L. J. Callan
Regional Administrator

Docket Nos. 50-498; 50-499
License Nos. NPF-76; NPF-80

Enclosure: Notice of Violation to Raytheon

cc w/Enclosure: (See Next Page)

Raytheon Engineers and
Constructors, Inc.

-4-

cc w/Enclosure:

Lawrence E. Martin, General Manager
Nuclear Assurance & Licensing
Houston Lighting & Power Company
P.O. Box 289
Wadsworth, Texas 77483

Mr. J. C. Lanier/Mr. M. B. Lee
City of Austin
Electric Utility Department
721 Barton Springs Road
Austin, Texas 78704

Mr. K. J. Fiedler/Mr. M. T. Hardt
City Public Service Board
P.O. Box 1771
San Antonio, Texas 78296

Jack R. Newman, Esq.
Morgan, Lewis & Bockius
1800 M. Street, N.W.
Washington, D.C. 20036-5869

Mr. G. E. Vaughn/Mr. C. A. Johnson
Central Power & Light Company
P.O. Box 289
Mail Code: N5012
Wadsworth, Texas 77483

INPO
Records Center
700 Galleria Parkway
Atlanta, Georgia 30339-5957

Mr. Joseph M. Hendrie
50 Bellport Lane
Bellport, New York 11713

Bureau of Radiation Control
State of Texas
1100 West 49th Street
Austin, Texas 78756

John L. Howard, Director
Environmental Policy
Office of the Governor
P.O. Box 12428
Austin, Texas 78711

Raytheon Engineers and
Constructors, Inc.

-5-

cc w/Enclosure: (Con't)
Judge. Matagorda County
Matagorda County Courthouse
1700 Seventh Street
Bay City, Texas 77414

Licensing Representative
Houston Lighting & Power Company
Suite 610
Three Metro Center
Bethesda, Maryland 20814

Rufus S. Scott, Associate General Counsel
Houston Lighting & Power Company
P.O. Box 61867
Houston, Texas 77208

Joseph R. Egan, Esq.
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2300 N Street, N.W.
Washington, D.C. 20037

Mr. J. W. Beck
Little Harbor Consultants, Inc
44 Nichols Road
Cohasset, MA 02025-1166

James Remeika
Assistant Human Resources Counsel
Raytheon Company
141 Spring Street
Lexington, Massachusetts 02173-7899

Thomas H. Smith
1804 Lloyd
Bay City, Texas 77414

Earl V. Keene
909 Virnham Woods Blvd.
#1
Pasadena, Texas 77503

Timothy Sloan, Esq.
P.O. Box 2171
Bay City, Texas 77404-2172

cc w/Enclosure: (See Next Page)

Raytheon Engineers and
Constructors, Inc.

-6-

cc w/Enclosure: (Con't)
Ms. Billie Garde, Esq.
Hardy & Johns
2 Houston Center, Suite 500
Houston, Texas 77010

Edward A. Slavin, Jr., Esq.
35 S.E. 8th Terrace
Deerfield Beach, Florida 33441-4340

NOTICE OF VIOLATION

Raytheon Engineers and Constructors, Inc.

EA 96-137

Based on the NRC's review of a September 29, 1995 DOL Administrative Law Judge's Recommended Decision and Order in the case of Earl V. Keene (95-ERA-004), a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below.

10 CFR 50.7 states, in part, that discrimination by a Commission licensee or a contractor of a Commission licensee against an employee for engaging in certain protected activities is prohibited. The activities which are protected are defined in Section 211 of the Energy Reorganization Act, as amended, and include, but are not limited to, reporting of safety concerns by an employee to his employer or the NRC.

Contrary to this requirement, in March and May 1994, Raytheon Engineers and Constructors, Inc., a contractor of Houston Lighting & Power Company, a Commission licensee, discriminated against an employee who engaged in protected activities. Specifically, a Department of Labor Administrative Law Judge found in a Recommended Decision and Order issued September 29, 1995, that Earl V. Keene was the subject of employment discrimination in 1994 for raising concerns about signing off on electrical maintenance work he did not perform, a protected activity. The discriminatory treatment included being selected for a March 24, 1994 reduction in force, receiving a lower performance appraisal rating, and being subjected to fitness-for-duty testing on May 24, 1994. (01013)

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

Pursuant to the provisions of 10 CFR 2.201, Raytheon Engineers and Constructors, Inc., a contractor to a Commission licensee, is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Arlington, Texas.
this 19th day of September 1996

August 1, 1996

EA 96-199

Tennessee Valley Authority
ATTN: Mr. Oliver D. Kingsley, Jr.
President, TVA Nuclear and
Chief Nuclear Officer
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report Nos. 50-259, 50-260, and 50-296/96-05)

Dear Mr. Kingsley:

This refers to the inspection conducted on April 28 through June 8, 1996, at your Browns Ferry facility. The inspection included a review of the circumstances surrounding the response of the Unit 2 Reactor Core Isolation Cooling (RCIC) System following a reactor scram on May 10, 1996. The results of our inspection were sent to you by letter dated June 19, 1996. A closed, predecisional enforcement conference was conducted in the Region II office on July 11, 1996, with members of your staff to discuss the apparent violations, the root causes, and your corrective actions to preclude recurrence. A list of conference attendees, NRC slides, and a copy of your presentation materials are enclosed. Prior to the conference, you provided in a letter dated July 8, 1996, your views on the application of the Enforcement Policy in this case.

Based on the information developed during the inspection and the information that you provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report. Violation A involved the inoperability of the Unit 2 RCIC for a period greater than that allowed by Technical Specifications (TSs). Specifically, on May 10, 1996, in response to a feedwater transient and subsequent reactor scram, RCIC briefly initiated and then tripped on high turbine exhaust pressure which rendered the system inoperable. The root causes of the RCIC inoperability were determined to be inadequate design review and post-modification testing for the replacement of the turbine exhaust check valve during the 1996 refueling outage. Specifically, the engineering evaluation associated with the check valve replacement used improper steam flow inputs and failed to consider RCIC system startup transient behavior. Further, engineering failed to recognize and require the performance of an adequate post modification test to assure the equipment change did not affect full RCIC system performance. As a result of these deficiencies, the RCIC turbine exhaust peak pressure exceeded the

turbine trip setpoint causing the system to fail when called upon to operate on May 10, 1996.

Although the inoperability of RCIC did not have a significant consequence to safety because RCIC was not needed to mitigate the May 10, 1996 transient, the violation is nonetheless of significant regulatory concern because multiple failures occurred in your engineering design, review, and testing programs which permitted the plant to operate under conditions in which RCIC could not perform its intended function in the automatic mode of operation. Although NRC recognizes that RCIC is not a 10 CFR Part 50, Appendix B safety system, it is important to safety, and your failure to ensure adequate design controls and conduct testing to verify the system was fully functional following system alterations resulted in a significant failure to comply with TS. Therefore, Violation A is classified in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III violation.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last 2 years¹, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process described in Section VI.B.2 of the Enforcement Policy. In this case, the NRC concluded that it is not appropriate to give credit for *Identification* because the violation was discovered as a result of the May 10, 1996 event, and prior opportunities existed for you to identify the problem earlier. These opportunities included your initial engineering calculation and modification review processes; your designer/checker independent verification process; review of a previously issued General Electric Service Information Letter, that provided you information relative to a more appropriate setting for the RCIC turbine exhaust pressure trip setpoint; and conduct of testing following implementation of the check valve modification. With regard to consideration for *Corrective Action*, at the conference you stated that your actions included: (1) performance of a detailed root cause analysis; (2) implementation of higher turbine exhaust trip setpoints; (3) performance of an extent of condition review on previously issued and implemented design change notices; (4) counseling of involved employees and reinforcement of expectations and lessons learned for other engineering personnel; (5) establishment of an Engineering Review Board to independently review design changes and non-conformances; and (6) procedural revisions to effect improvements in design reviews, coordination between design and system engineering, the independent verification process, and designer testing

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¹ A Severity Level II violation and proposed civil penalty of \$80,000 were issued on February 14, 1996 (EA 95-220) related to employee discrimination in Department of Labor Case No. 93-ERA-044.

program responsibilities. Based on the above, the NRC determined that your corrective actions were comprehensive, and credit was warranted for this factor.

In the application of the Enforcement Policy as described above, NRC considers previous escalated enforcement actions, and in this case, would normally result in a base civil penalty for this action. However, the purpose of this portion of the Policy is to reflect past licensee performance, including consideration of whether the current violation at issue is a relatively isolated Severity Level III violation. In this case, there has been a previous escalated enforcement action, which, although issued in 1996, occurred in 1993, and is greater than two years prior to the occurrence of this violation. This fact, in conjunction with the recent overall good performance at Browns Ferry warrants the exercise of discretion in accordance with Section VII.B.6 of the Enforcement Policy. Therefore, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, no civil penalty is being proposed in this case. However, significant violations in the future could result in a civil penalty.

Violation B has been categorized at Severity Level IV and is also described in the enclosed Notice. It involved the failure to ensure that the post-modification testing required by your In-Service Testing Procedures were performed following the aforementioned RCIC turbine exhaust check valve replacement and the High Pressure Coolant Injection turbine exhaust valve replacement conducted during the 1996 refueling outage. Although conduct of such testing may not have prevented Violation A, Violation B is of concern because it was identified by the NRC, it revealed weaknesses in personnel knowledge and coordination of American Society of Mechanical Engineers Section XI testing requirements, and had the potential for impacting a safety system required for accident mitigation.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include

any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

Original signed by L. A. Reyes

Stewart D. Ebnetter
Regional Administrator

Docket No. 50-260
License No. DPR-52

Enclosures: 1. Notice of Violation
2. List of Conference Attendees
3. NRC Slides
4. Licensee Presentation Material

cc w/encls:
O. J. Zeringue, Senior Vice President
Nuclear Operations
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Dr. Mark O. Medford, Vice President
Technical Services
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

R. D. Machon
Site Vice President
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P. O. Box 2000
Decatur, AL 35602

Raul R. Baron, General Manager
Nuclear Licensing
Tennessee Valley Authority
4G Blue Ridge
1101 Market Street
Chattanooga, TN 37402-2801

cc w/encls: (Cont'd on Page 5)

TVA

5

cc w/encls (Cont'd)
Pedro Salas
Site Licensing Manager
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P. O. Box 2000
Decatur, AL 35602

TVA Representative
Tennessee Valley Authority
One Massachusetts Avenue, Suite 300
Washington, DC 20001

General Counsel
Tennessee Valley Authority
ET 10H
400 West Summit Hill Drive
Knoxville, TN 37902

Chairman
Limestone County Commission
310 West Washington Street
Athens, AL 35611

State Health Officer
Alabama Department of Public Health
434 Monroe Street
Montgomery, AL 36130-1701

NOTICE OF VIOLATION

Tennessee Valley Authority
Browns Ferry Nuclear Plant, Unit 2

Docket No. 50-260
License No. DPR-52
EA 96-199

During an NRC inspection conducted on April 28 through June 8, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. Technical Specification 3.5.F.1. requires, in part, that the reactor core isolation cooling (RCIC) system be operable whenever there is irradiated fuel in the reactor vessel and the reactor vessel pressure is above 150 pounds per square inch gauge (psig). If the RCIC system is inoperable, the reactor may remain in operation for a period not to exceed seven days if the high pressure coolant injection system is operable during such time.

Contrary to the above, from April 23 to May 10, 1996, the RCIC system was inoperable with irradiated fuel in the reactor vessel and reactor vessel pressure greater than 150 pounds per square inch gauge. The reactor remained in operation during this period, which exceeded seven days. (01013)

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

- B. Technical Specification 1.0.MM.1 requires that In-service Testing of American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(f).

IWV-3200 of Section XI of the ASME Boiler and Pressure Vessel Code requires that when a valve has been replaced or repaired or has undergone maintenance that could affect its performance, and prior to the time it is returned to service, it shall be tested to demonstrate that the performance parameters, which could be affected by the replacement, repair, or maintenance, are within acceptable limits.

Site Standard Practice-8.6, ASME Section XI In-Service Testing of Pumps and Valves, Revision 12, implements the requirements of IWV-3200 of Section XI of the ASME Boiler and Pressure Vessel Code (In-Service Testing Program). Appendix H of Site Standard Practice-8.6 requires Procedure 2-SI-4.5.F.1.d., Revision 25, to be performed following maintenance on the Reactor Core Isolation Cooling System Turbine Exhaust Check Valve, 2-CKV-71-0580 and Procedure 2-SI-4.5.E.1.d., Revision 34, or 2-SI-4.5.E.1.d(dp), Revision 4, to be performed following maintenance on the High Pressure Coolant Injection System Turbine Exhaust Check Valve, 2-CKV-73-0603.

Enclosure 1

Contrary to the above:

- (1) On April 23, 1996, the RCIC system turbine exhaust Check Valve, 2-CKV-71-0580 was returned to service after having undergone maintenance (replacement), without Procedure 2-SI-4.5.F.1.d being performed on the valve.
- (2) On April 23, 1996, the High Pressure Coolant Injection System Turbine Exhaust Check Valve, 2-CKV-73-0603 was returned to service after having undergone maintenance (replacement), without Procedure 2-SI-4.5.E.1.d or 2-SI-4.5.E.1.d(dp) being performed on the valve. (02014)

This is a Severity IV violation (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, the Tennessee Valley Authority is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the Browns Ferry Nuclear Plant, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Atlanta, Georgia
this 1st day of August 1996

LIST OF PREDECISIONAL ENFORCEMENT CONFERENCE ATTENDEES
JULY 11, 1996

Tennessee Valley Authority

O. Zeringue, Senior Vice President, Nuclear Operations
R. Machon, Site Vice President, Browns Ferry Nuclear Plant (BFN)
G. Preston, Plant Manager, BFN
R. Baron, General Manager, Nuclear Assurance and Licensing
H. Williams, Site Engineering, BFN
T. Shriver, Nuclear Assurance and Licensing Manager, BFN
P. Salas, Licensing Manager, BFN
B. Morris, Licensing, BFN
J. Wolcott, Engineering, BFN
D. Green, Acting Chief Engineer

Nuclear Regulatory Commission

L. Reyes, Deputy Regional Administrator, Region II (RII)
J. Jaudon, Acting Deputy Director, Division of Reactor Projects (DRP), RII
B. Uryc, Director, Enforcement and Investigations Coordination Staff (EICS),
RII
M. Lesser, Chief, Projects Branch 6, DRP, RII
P. Fredrickson, Chief, Special Inspection Branch, Division of Reactor Safety
J. Williams, Project Manager, Projects Directorate II-3, Office of Nuclear
Reactor Regulation
C. Evans, Regional Counsel, RII
L. Wert, Senior Resident Inspector, BFN
A. Boland, Enforcement Specialist, EICS, RII
M. Satorius, Enforcement Coordinator, Office of Enforcement*

* Participated by Telephone

Enclosure 2

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30322-0199

August 16, 1996

EA 96-231

Virginia Electric and Power Company
ATTN: Mr. J. P. O'Hanlon
Senior Vice President - Nuclear
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

SUBJECT: NOTICE OF VIOLATION
(NRC Special Inspection Report Nos. 50-280 and 50-281/96-08)

Dear Mr. O'Hanlon:

This refers to the inspection conducted on June 17 through July 1, 1996, at the Surry facility. The inspection included a review of the circumstances surrounding the inoperability of the Unit 1 and Unit 2 containment hydrogen analyzers. On June 10, 1996, you formally notified the NRC of this condition in Licensee Event Report No. 50-280 and 50-281/96-004-00. The results of our inspection were sent to you by letter dated July 11, 1996. A predecisional enforcement conference was conducted in the Region II office on August 7, 1996, to discuss the apparent violation, the root cause, and your corrective actions to preclude recurrence. This conference was open for public observation in accordance with the Commission's trial program for conducting conferences as discussed in the Federal Register, 57 FR 30762, July 10, 1992, and 59 FR 36796, July 19, 1994. A list of conference attendees, NRC slides, and a copy of Virginia Electric and Power Company's (VEPCO) presentation materials are enclosed.

Based on the information developed during the inspection and the information that was provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding them are described in detail in the subject inspection report. Violation A involved the inoperability of the Unit 1 and Unit 2 containment hydrogen analyzers for a period greater than that allowed by Technical Specifications (TSs). The inoperable condition existed for at least five and a half years (from October 1990 through May 1996), and may have existed as long ago as October 1986 and November 1985, for Unit 1 and 2, respectively. Although the containment hydrogen analyzer hardware was capable of performing its intended function, the system was not capable of performing its design function given the as-left, standby system configuration (function selector switch in the ZERO position), the in-place procedural requirements for calibration and system operation, and the lack of operator awareness of system operation.

Violation B involved the failure to establish adequate procedures to assure the operability of the containment hydrogen analyzers. Specifically, Instrumentation and Control (I&C) Procedures and Emergency Operating Procedures (EOPs) lacked the continuity necessary to assure operation of the

system during an emergency. Since October 1990, I&C Procedures have required that the function selector switches (FSS) at the remote and local containment hydrogen analyzer panels be placed in the ZERO position. For the hydrogen analyzers to operate properly, the FSS position on either the remote or local hydrogen analyzer panel must be in SAMPLE, and the post-accident monitoring (PAM) main power switch in the Control Room must be in ANALYZE. Although the system does not automatically start and could be operated manually with FSSs in an initial position of ZERO or SAMPLE, the EOPs did not address the need to verify or switch the FSS position from ZERO to SAMPLE in order to initiate containment sampling. Only the position of the PAM main power switch was described in the EOPs. Further, operators were unaware of the FSS required position. In their as found configuration in May 1996, the hydrogen analyzers would not have indicated actual hydrogen atmospheric concentration when aligned to containment.

Although the inoperability of the containment hydrogen analyzers did not have a significant consequence to safety because they were not called upon to operate during this period, the violations are nonetheless of significant regulatory concern. Notwithstanding the fact that the equipment was technically capable of performing its function, recognition of the FSS mispositioning by operations, I&C, or other support personnel would have been required during an emergency and the switch repositioned for proper system operation. Although other means would have been available to determine hydrogen concentration following an accident, the degree to which operators would have relied upon the erroneous information from the hydrogen analyzers and for how long, to make decisions regarding start-up of the hydrogen recombiners to reduce hydrogen levels in containment, is uncertain. In addition, the NRC is concerned about the length of time this condition went undetected and the procedural revision and review processes which failed to uncover this condition. Therefore, these violations are classified in the aggregate in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III problem. Because your facility has been the subject of an escalated enforcement action within the last two years,¹ the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. In this case, credit is warranted for *Identification* in that you identified the violation. The attentiveness and questioning attitude of the visiting North Anna operator who initially identified the mispositioned FSSs is particularly noteworthy. With regard to *Corrective Action*, your immediate actions included verification of the proper configuration and placement of the FSSs in the SAMPLE position. At the conference, you stated that additional corrective actions included:

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¹ On November 22, 1995, a Severity Level III problem was issued related to multiple violations associated with the September 1995 unplanned reduction in reactor vessel water level (EA 95-223).

(1) revision of the calibration procedures to require that the FSSs be left in the SAMPLE position; (2) addition of the containment hydrogen analyzer FSS position verification to the operator logs; (3) comparison of Surry and North Anna operator logs to identify inconsistencies; (4) review of the TS and Emergency and Abnormal Procedures to determine if other procedural interface inadequacies existed on other safety related equipment; and (5) review of the procedure change process. At the conference, you indicated that no similar issues were identified as a result of these efforts. Based on the above, the NRC determined that your corrective actions were prompt and comprehensive, and credit was warranted for this factor.

Therefore, to encourage prompt identification and comprehensive correction of violations, I have been authorized, after consultation with the Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

At the predecisional enforcement conference you offered three clarifications related to the content of NRC Inspection Report Nos. 50-280, 281/96-08. These comments were: (1) At various locations in the Inspection Report it is indicated that the mispositioned FSSs resulted in a loss of safety function. You stated that although the containment hydrogen analyzers were declared inoperable, the overall safety function was not lost; (2) Page 2, the 5th Paragraph of the report states "Return to service in CAL-GW-175 placed the FSSs in the SAMPLE position which is the correct position." You stated that the sentence should state "... which is one of two correct positions;" and (3) Page 3, the 3rd Paragraph of the report states that NRC concluded that an additional root cause of this event was a lack of knowledge by the I&C technicians. You clarified that this was not a licensee position, and that I&C personnel fully understood the system, they just were not knowledgeable of the procedural interface deficiency which existed with the EOPs. Operations personnel, however, were unfamiliar with the requirements for FSS positions.

We have evaluated your comments and acknowledge that the total safety function for analyzing post accident hydrogen concentration in containment was not lost as a result of the inoperability of the hydrogen analyzers. Specifically, the hydrogen analyzer hardware was functional, and redundant containment sampling means were available. However, the certainty with which these redundant methods would have been employed is unknown. In addition, we have determined that your position with respect to Items (2) and (3) above are not valid. Specifically, the appropriate system alignment to permit operation of the containment hydrogen analyzers from the Control Room Annex or the Auxiliary Building is with the FSSs in the SAMPLE position. In addition, I&C personnel were not knowledgeable of the relationship between the as-left configuration of the containment hydrogen analyzers and the EOPs. We do agree that operations personnel also exhibited a lack of knowledge with respect to the required position of the FSS. Lack of operator knowledge was not specifically addressed as a root cause in the Inspection Report; however, no addendum to the Inspection Report is required, in that, the report reflects NRC understanding at the time the report was issued. This letter and enforcement action corrects NRC's understanding with respect to the acceptable positions of the FSSs and the root causes of the violations.

VEPCO

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You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

Stewart D. Ebner
Regional Administrator

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

Enclosures: 1. Notice of Violation
2. Conference Attendees (not to be published in NUREG-0940)
3. NRC Slides (not to be published in NUREG-0940)
4. VEPCO Presentation Materials (not to be published in NUREG-0940)

cc w/encls:

M. L. Bowling, Manager
Nuclear Licensing and Operations Support
Virginia Electric & Power Company
Innsbrook Technical Center
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Glen Allen, VA 23060

David A. Christian, Manager
Surry Power Station
Virginia Electric & Power Company
5570 Hog Island Road
Surry, VA 23883

W. R. Matthews, Manager
North Anna Power Station
P. O. Box 402
Mineral, VA 23117

Ray D. Peace, Chairman
Surry County Board of Supervisors
P. O. Box 130
Dendron, VA 23839

cc w/encls: (Cont'd on Page 5)

cc w/encls (Cont'd):
Dr. W. T. Lough
Virginia State Corporation Commission
Division of Energy Regulation
P. O. Box 1197
Richmond, VA 23209

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Hunton and Williams
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951 E. Byrd Street
Richmond, VA 23219

Robert B. Strobe, M.D., M.P.H.
State Health Commissioner
Office of the Commissioner
Virginia Department of Health
P. O. Box 2448
Richmond, VA 23218

Attorney General
Supreme Court Building
900 East Main Street
Richmond, VA 23219

NOTICE OF VIOLATION

Virginia Electric and Power Company
Surry Power Station

Docket Nos. 50-280 and 50-281
License Nos. DPR-32 and DPR-37
EA 96-231

During an NRC inspection conducted on June 17 through July 1, 1996, violations of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. Technical Specification 3.7.G.1 requires that two independent containment hydrogen analyzers be operable during reactor critical or power operation.

Contrary to the above, the Unit 1 and Unit 2 containment hydrogen analyzers were inoperable during reactor critical or power operation from February 28, 1991, and October 21, 1990, respectively, until May 22, 1996, due to the function selector switches being placed in the ZERO position following calibration. (01013)

- B. Technical Specifications 6.4.A.1. and 6.4.A.2 require, in part, that detailed written procedures with appropriate instructions be provided for the operation, calibration and testing of all systems and components involving nuclear safety of the station.

Contrary to the above, from October 24 and October 20, 1990 for Units 1 and 2, respectively, Emergency Operating Procedures 1-E-1 and 2-E-1, "Loss of Reactor or Secondary Coolant," and Calibration Procedures 1-IPT-FT-GW-A-104 and 2-IPT-FT-GW-A-204, Containment Hydrogen Analyzer H2A-GW-104(204) Quarterly Functional Test, did not provide appropriate instructions to place the hydrogen analyzers (systems involving nuclear safety of the station) in service. Specifically, the procedures did not require placing the function selector switches for the hydrogen analyzers in the SAMPLE position, which is the required position for sampling the containment atmosphere for hydrogen concentration. (01023)

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

Pursuant to the provisions of 10 CFR 2.201, Virginia Electric and Power Company is hereby required to submit a written statement or explanation to the U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D. C. 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the Surry Power Station, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full

Enclosure 1

Notice of Violation

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compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Under the authority of Section 182 of the Action, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Atlanta, Georgia
this 16th day of August

LIST OF CONFERENCE ATTENDEES
AUGUST 7, 1996

Virginia Electric and Power Company

R. Saunders, Vice President , Nuclear Operations
M. Bowling, Manager, Nuclear Licensing and Operations Support
D. Christian, Surry Station Manager
B. Shriver, Assistant Station Manager, Nuclear Safety and Licensing
B. Stanley, Director, Nuclear Oversight
T. Stafford, Instrumentation and Control Department

Nuclear Regulatory Commission

S. Ebnetter, Regional Administrator, Region II (RII)
J. Jaudon, Acting Deputy Director, Division of Reactor Projects (DRP), RII
A. Gibson, Director, Division of Reactor Safety
B. Uryc, Director, Enforcement and Investigations Coordination Staff (EICS),
RII
C. Evans, Regional Counsel, RII
G. Belisle, Chief, Reactor Projects Branch 5 (RPB5), DRP, RII
G. Edison, Project Manager, Office of Nuclear Reactor Regulation*
R. Musser, Senior Resident Inspector, RPB5, DRP, RII
K. Poertner, Resident Inspector, RPB5, DRP, RII
P. Hopkins, Project Engineer, RPB5, DRP, RII
A. Boland, Enforcement Specialist, EICS, RII
R. Hannah, Office of Public Affairs, RII
M. Satorius, Enforcement Coordinator, Office of Enforcement*

Members of the Public

No members of the public attended the conference.

*Participated by Telephone

Enclosure 2

UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

October 1, 1996

EA 96-267

J. V. Parrish, Chief Executive Officer
Washington Public Power Supply System
3000 George Washington Way
P.O. Box 968, MD 1023
Richland, Washington 99352

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report No. 50-397/96-15)

Dear Mr. Parrish:

This refers to the inspection conducted from June 24 through July 29, 1996, at the Washington Nuclear Project-2 (WNP-2) reactor facility. The inspection was conducted to review the effluents program, including a review of the problems associated with the primary calibration of the reactor building stack effluent monitor. Your staff determined that these problems represented a loss-of-emergency assessment capability and subsequently notified the NRC on March 6, 1996, in accordance with 10 CFR 50.72(b)(v). Your staff issued a Special Report to the NRC dated March 20, 1996, further describing the problems. A telephonic exit briefing was held on July 29, 1996, to inform WNP-2 personnel of our disposition of the inspection results. The results of our inspection are documented in the subject report. The inspection report was issued on August 9, 1996, and described an apparent violation of requirements for which the NRC was considering escalated enforcement action.

Based on the information developed during the inspection and the information that you provided in your response to the inspection report dated September 9, 1996, the NRC has determined that a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation and the circumstances surrounding it are described in detail in the subject inspection report. The violation involved WNP-2's failure to meet an emergency planning standard involving assessment (10 CFR 50.47(b)). During the Spring of 1993, WNP-2 installed a radioactive monitoring system for post-accident gaseous discharges. An engineer recorded an incorrect reading during the primary calibration of the mid range monitor, and the resulting erroneous values (calibration factors) were used in offsite dose assessment software. The calibration factor was low by a factor of about 4.4 for the mid-range monitor and by a factor of about 8.1 for the high range monitor. As a result of WNP-2's long term self-assessment program, the errors were discovered in March 1996. Your September 9, 1996, letter stated that the violation resulted from an inadequate test procedure and that contributing causes included undetected personnel error, possible effects of excessive overtime, and inadequate management involvement.

The violation is significant because it could have resulted in delays in assessing the significance of the offsite consequences during an actual event, although no such emergency occurred. As a result, WNP-2 was not able to meet one of the emergency planning standards involving assessment (10 CFR 50.47(b)). Therefore, this violation has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600 at Severity Level III.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last 2 years¹, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Because WNP-2 personnel identified the violation, the NRC has determined that credit is warranted for the *Identification* factor. Further, the NRC has determined that credit is warranted for the *Corrective Action* factor. Your September 9, 1996, response stated that the corrective actions for the violation included promptly declaring the post-accident monitoring system inoperable, taking appropriate compensatory measures, notifying the NRC, changing the offsite dose assessment software to correct the deficiency, comparing setpoint data with vendor data for consistency, reviewing other effluent monitors for similar problems, and counseling the Plant Oversight Committee members regarding schedule pressures and the necessity to perform detailed technical reviews.

Therefore, to encourage prompt identification and comprehensive correction of violations, I have been authorized not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence is already adequately addressed on the docket by your March 20, 1996, Special Report to the NRC; NRC Inspection Report No. 50-397/96-15; and your September 9, 1996, response to the apparent violation. Therefore, you are not required to respond to the provisions of 10 CFR 2.201 unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

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¹ A Severity Level III violation and a proposed imposition of a \$50,000 civil penalty was issued on September 7, 1995, (EA 95-109). The violation was associated with the removal and transfer of spent Reactor Water Cleanup System filters.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to submit one, will be placed in the NRC Public Document Room (PDR).

Sincerely,

L. E. Cailan
Regional Administrator

Docket No. 50-397
License No. NPF-21

Enclosure: Notice of Violation

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NOTICE OF VIOLATION

Washington Public Power Supply System
Washington Nuclear Project-2

Docket No. 50-397
License No. NPF-21
EA 96-267

During an NRC inspection conducted on June 24 through July 29, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

10 CFR 50.54(q) states, "A licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in 10 CFR 50.47(b)...." 10 CFR 50.47(b) states, "The onsite and...offsite emergency response plans for nuclear power reactors must meet the following standards:....(9) Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use."

Contrary to the above, from July 1993 through March 1996, adequate methods, systems, and equipment for assessing and monitoring potential offsite consequences of a radiological emergency condition were not in use. Specifically, errors were made during the initial calibration of the intermediate range monitor PRM-RE-1B and high range monitor PRM-RE-1C of the reactor building effluent monitoring system resulting in the errors in establishing a correlation between the post-accident monitor indications and radionuclide contents in the elevated release duct.

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

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket by your March 20, 1996, Special Report to the NRC; NRC Inspection Report No. 50-397/96-15; and your September 9, 1996, response to the apparent violation. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, ATTN: Enforcement Officer, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

Dated at Arlington, Texas,
this 1st day of October, 1996

BIBLIOGRAPHIC DATA SHEET

(See instructions on the reverse)

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(Assigned by NRC. Add Vol., Supp., Rev.,
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10. SUPPLEMENTARY NOTES

11. ABSTRACT (200 words or less)

This compilation summarizes significant enforcement actions that have been resolved during the period (July - December 1996) and includes copies of letters, Notices, and Orders sent by the Nuclear Regulatory Commission to reactor licensees with respect to these enforcement actions. It is anticipated that the information in this publication will be widely disseminated to managers and employees engaged in activities licensed by the NRC, so that actions can be taken to improve safety by avoiding future violations similar to those described in this publication.

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