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

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

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 Cooldown." 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, I90-0024, 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,

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

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
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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

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