

ENCLOSURE

NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

Niagara Mohawk Power Corporation (NMPC)
Nine Mile Point, Units 1 and 2

Docket Nos. 50-220/50-410
License Nos. DPR-63/NPF-69
EA Nos. 96-474; 96-475;
96-494; 96-541

During three separate NRC inspections conducted between October 7 and November 30, 1996 for which several exit meetings were held (the last of which was on December 20, 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 Related to Corrective Actions

10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants," 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 that corrective actions are taken to preclude recurrence.

A. Contrary to the above, as of November 5, 1996, measures were not established to assure a condition adverse to quality, namely, potential overfill of the Unit 1 reactor pressure vessel (RPV), was promptly identified and corrected despite several opportunities to do so, as evidenced by the following examples. Specifically:

1. Following a reactor scram on November 5, 1996, the system for overfill protection failed to prevent FW injection on high water level due to leakage past the FW flow control valve. Additionally, the procedure for response to a reactor scram (N1-SOP-1, Revision 5) did not provide direction to verify that the overfill automatic protective actions occurred nor direction to take manual action if those actions did not occur, and training did not reinforce the actions necessary to prevent an overfill event.
2. Deviation/event report (DER) 1-92-3353 was initiated on August 27, 1992, to document that the wide range reactor water level indication read lower than expected during power operations. The condition was evaluated to be acceptable and it was determined that no equipment modifications were required. However, the corrective action was deficient because the operators in the control room were not made aware of the discrepancy to ensure correct interpretation of RPV level

indication so as to prevent an overflow event.

3. On July 29, 1996, following a Unit 1 normal plant shutdown with a manual reactor scram, the operators allowed RPV water level to remain above the high level setpoint (95 inches) for approximately 15 minutes before taking action to lower level, a condition adverse to quality. Subsequent to the shutdown, the licensee's corrective actions were narrowly focused in that training was provided and procedure changes were made to address the assumed cause of the high level, but no action was taken to identify why the operators did not recognize the need to take prompt action to restore level to less than 95 inches, as specified by N1-SOP-1.

As a result, operators allowed FW injection to continue for approximately 50 minutes when FW injection was not stopped automatically after the high level trip setpoint was exceeded due to leakage past the FW flow control valves following a scram on November 5, 1996. As a result, approximately 30,000 gallons of water entered the main steam lines. (01013)

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

- B. Contrary to the above, prior to September 1996, measures were not established to assure that conditions adverse to quality were promptly identified and corrected. Specifically, the pressure control valve (2ICS*PCV115) for the Unit 2 reactor core isolation cooling (RCIC) turbine lube oil cooler was failed in the open position on January 26, 1991. However, this failure, constituted a condition adverse to quality because the downstream piping and lube oil cooler were routinely operated above their design pressure of 150 psig. This resulted in system degradation and could have adversely affected the RCIC operability. This condition adverse to quality was not corrected until September, 1996. (02013)
- C. Contrary to the above, prior to August 14, 1996, measures were not established to assure that conditions adverse to quality were promptly identified and corrected. Specifically, in 1992, NMPC reviewed the control room chiller condenser water low flow trip setpoint following cancellation of Modification PN2Y87MX057 and concluded that the setpoint was conservative. In September 1995, the Unit 2 Division II control room chiller tripped twice due to low condenser flow concurrent with the start of the emergency diesel generator (EDG). The evaluation of these events and the 1992 review failed to recognize that, in response to a postulated design basis condition, the EDGs are expected to start, resulting in service water pressure and flow transients; and that sufficient margin was not provided for the control room chiller low flow trip setpoint to compensate for these transients. This constituted a condition adverse to quality because the CR chillers could trip following a postulated design basis accident. As a result of the narrowly focused evaluations, the licensee did not identify this condition adverse to quality until August 14, 1996.

(02023)

- D. Contrary to the above, prior to October 1996, measures were not established to assure that conditions adverse to quality were promptly identified and corrected. Specifically, while cleaning the Unit 2 suppression pool during a refueling outage (RFO4) in 1995, NMPC recognized and documented in a deviation/event report (DER) that most of the foreign material removed from the suppression pool must have entered through the downcomers. Despite this recognition, NMPC did not examine the downcomers. As a result of this failure to identify and correct a condition adverse to quality, a significant amount of debris was left in the downcomer from June 1995 until October 1996. The foreign material could have adversely affected the performance of the emergency core cooling system pumps by clogging the suction strainers.
- (02033)

Violations I.B, I.C, and I.D are classified in the aggregate as a Severity Level III problem (Supplement I).

Civil Penalty - \$50,000.

II. Violations Related to Design Control

10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires that measures be established to assure that applicable regulatory requirements and design basis for structures, systems, and components are correctly translated into specifications, drawings, and procedures. These measures shall include provisions to assure that appropriate quality standards are specified and included in design documents and that deviations from such standards are controlled. The design control measures shall provide for verifying or checking the adequacy of design, such as by the performance of design reviews. Design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design.

The NMPC Quality Assurance Topical Report (QATR), Section B.3, states that station modifications are accomplished in accordance with approved designs and procedures. The design controls apply to preparation, review and revision of design documents, including the correct translation of applicable regulatory requirements and design bases into those documents.

Nuclear Engineering Procedure NEP-DES-340, "Design Calculations," Step 2.1, requires the discipline supervisor to review calculation assumptions, and the validity of their application. Step 2.3 requires the calculation reviewer to check the calculation assumptions.

- A. Contrary to the above, as of October 11, 1996, regulatory requirements and design basis were not correctly translated into specifications, and calculation assumptions were not reviewed at Unit 2. Specifically, NMPC did not adequately verify or check the adequacy of design for motor-operated valves 2CHS*MOV107, 2ICS*MOV126, 2RHS*MOV25A, and 2RHS*MOV25B in the high pressure core spray, RCIC, and containment spray systems. Motor-actuator run efficiency was utilized as a design input without verifying the validity of the application. Consequently, the functionality of the valves under design-basis pressure locking conditions was not adequately assured. (03013)
- B. Contrary to the above, as of November 1, 1996, regulatory requirements and design basis were not correctly translated into specifications, and calculation assumptions were not reviewed at Unit 2. Specifically, the calculation entitled "RCIC pump cooler differential pressure evaluation", dated June 15, 1992, was incorrect in that it did not include the suction pressure of the RCIC pump when calculating the downstream pressure of 2ICS*PCV115, assuming the relief valve failed to open. Also, this calculation was not reviewed by the discipline supervisor. The calculation was used as the basis for two operability determinations for the RCIC system dated June 16, 1992, and August 24, 1993. As a result of the incorrect calculation, the operability determinations incorrectly concluded that the downstream pressure would not exceed the hydrostatic test pressure for the piping if the relief valve failed to open. Consequently, the RCIC system was operated with 2ICS*PCV115 failed open which had the potential to exceed the design of the system if the relief valve failed to open. (03023)
- C. Contrary to the above, as of November 1, 1996, regulatory requirements and design basis were not correctly translated into specifications, and calculation assumptions were not reviewed at Unit 2. Specifically, calculation A10.1-H-005 dated September 23, 1996, used an incorrect pressure input in determining the required size for the RCIC turbine lube oil cooler restricting orifice (2ICS*RO207). The independent review and the station operation review committee review failed to identify the incorrect design input. As a result, when 2ICS*RO207 was rebored in support of the design change to replace 2ICS*PCV115, the resulting orifice size was too small. With the incorrect orifice size, the RCIC turbine lube oil cooler and its associated piping could be operated at a pressure exceeding their design pressure and the relief valve could continuously lift during RCIC operation. (03033)

- D. Contrary to the above, as of August 14, 1996, regulatory requirements and design basis were not correctly translated into specifications, and calculation assumptions were not reviewed at Unit 2. Specifically, a 1988 setpoint calculation for the low condenser flow trip of the control room chillers, had failed to consider the effects of the service water pressure and flow transients that would be expected to occur when the EDGs started following a postulated design basis accident. As a result, when the setpoint change was implemented in 1989, the low flow trip setpoint was set excessively high. This resulted in both control room chillers being inoperable, contrary to Technical Specification 3.7.3 which requires two independent control room chiller subsystems to be operable when the plant is in operational conditions 1, 2, 3, and when irradiated fuel is being handled in the reactor building, during core alterations, and during operations with a potential for draining the reactor vessel and uncovering irradiated fuel. With the excessively high setpoint, the control room chillers could have inadvertently tripped when the EDGs started following a postulated design basis accident rendering them unable to perform their intended safety function without operator action. (03043)

Violations II.A - II.D 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, Niagara Mohawk 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 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. 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 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 234(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: 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 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 10th day of April, 1997