

NOTICE OF VIOLATION  
AND  
PROPOSED IMPOSITION OF CIVIL PENALTY

Rochester Gas and Electric Corporation  
Ginna Nuclear Power Station  
Rochester, New York

Docket No. 50-244  
License No. DPR-18  
EA 96-282

During an NRC inspection conducted from July 22-26, 1996, and August 6-9, 1996, for which exit meetings were conducted on August 9, 1996, and October 4, 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 Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures shall be established to assure that applicable regulatory requirements and design basis are correctly translated into specifications, drawings, procedures, and instructions, and shall provide for verifying and checking the adequacy of design, such as by the performance of design reviews, by alternate or simplified calculational methods, or by performance of a suitable testing program.

RG&E Engineering Procedure 3-P-121, Design Criteria, Revision 0, dated November 2, 1994, states, in part, in Section 3.2, that "...design inputs shall be specified and approved on a timely basis and to the level of detail necessary to permit the design activity to be carried out in a correct manner and to provide a consistent basis for making design decisions, accomplishing design verification measures, and evaluating design changes."

Contrary to the above, from June 28, 1995 (the date by which that the licensee committed to complete its Generic Letter 89-10 program), until August 3, 1996, design inputs for the Residual Heat Removal (RHR) Core Deluge Motor Operated Valves (MOVs) 852A and 852B were not adequately specified and approved to the level of detail necessary to permit the design activity for these valves to be carried out in a correct manner, and to provide a consistent basis for making design decisions and accomplishing design verification measures. The thrust requirements for the RHR core deluge valves, used to evaluate the performance of the MOVs, were not adequately validated; specifically, an outdated and unjustified 0.3 valve factor was assumed. This valve factor was unjustified because it was lower than valve factors issued for similar MOVs at Ginna and in the industry. As a result, the licensee did not adequately assure that the valves would operate under design basis conditions.

- B. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," 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. 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 appropriate levels of management.

Contrary to the above, prior to August 3, 1996, measures were not established to assure that certain conditions adverse to quality were promptly identified and corrected. Specifically,

1. During an NRC inspection in March-April 1995, prior to the licensee's completion of its Generic Letter 89-10 program, the NRC informed the licensee that the design inputs for core deluge valves 852A and 852B needed to be justified because the assumed valve factor of 0.3 was unusually low and had no recognized technical basis when compared to similar valves in the industry and at Ginna. Although the use of this valve factor constituted a significant condition adverse to quality, the licensee had not taken measures to assure, prior to the time of its shutdown of the reactor in August 1996, that the 0.3 valve factor accurately predicted performance of the valves.
2. When statically retesting the core deluge valves after maintenance during the Spring 1996 refuel outage, the licensee identified that the valves may not open when subject to degraded voltage, at 69% and 70% of nominal bus voltage respectively. Although the licensee had previously determined that the more limiting case (MOV 852A) would require 20,943 lbs of thrust to open, assuming a valve factor of 0.30, the licensee estimated that MOV 852A would develop only 11,845 lbs of thrust and documented these findings in its Action Reports (ARs) 96-0320 and 96-0338. However, despite this discrepancy, the licensee did not take appropriate corrective action; rather the licensee considered both RHR core deluge valves to be operable based on a single 1993 "stall test" performed on MOV 852A at 100% voltage. The stall test did not provide adequate assurance that the RHR core deluge valves could perform their safety function.

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

Civil Penalty - \$100,000

Pursuant to the provisions of 10 CFR 2.201, Rochester Gas and Electric 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 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(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 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 2<sup>nd</sup> day of December 1996