

NOTICE OF VIOLATION  
AND  
PROPOSED IMPOSITION OF CIVIL PENALTY

Texas A&M University  
Nuclear Science Center  
College Station, Texas

Docket No. 50-128  
License No. R-83  
EA 88-92

During NRC inspections conducted on March 7-9 and April 11-12, 1988, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988), 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. Violations Assessed a Civil Penalty

- A. 10 CFR 20.202(a) requires, in part, that each licensee supply appropriate personnel monitoring equipment to, and shall require the use of such equipment by, personnel who enter restricted and high radiation areas.

10 CFR 20.201(b) requires that each licensee make such surveys as may be necessary to comply with all sections of Part 20. As defined in 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above, during the period August 19 through November 17, 1987, an experimenter working in a high radiation area containing a mixed gamma neutron radiation field was not provided appropriate neutron personnel monitoring equipment. In addition, an adequate evaluation was not made to determine compliance with 10 CFR 20.101 which limits radiation doses to individuals in restricted areas in that the dosimeter was not properly placed to measure the maximum dose received by the experimenter.

- B. 10 CFR 20.202(b)(3) defines a "High Radiation Area" as any area, accessible to personnel, in which there exists radiation at such levels that a major portion of the body could receive in any 1 hour a dose in excess of 100 millirem.

10 CFR 20.203(c) requires, in part, that each high radiation area be posted with signs bearing the radiation symbol and the words CAUTION - HIGH RADIATION AREA and that each entrance or access point to a high radiation area shall be: (1) equipped with a control device which shall cause the level of radiation to be reduced below

that of a high radiation area; or (2) equipped with a control device which shall energize a conspicuous visible or audible alarm signal in such a manner that the individual entering the high radiation area and the licensee or a supervisor of the activity are made aware of the entry; or (3) maintained locked except during periods when access to the area is required, with positive control over each individual entry.

Contrary to the above, during the period August 19 through November 30, 1987, on various dates and for various periods of time, an area adjacent to Reactor Beam Port No. 1, with dose rates greater than 100 millirem per hour (up to 5 rem/hr) of combined gamma and neutron radiation levels was not posted with a sign bearing the radiation symbol and the words CAUTION - HIGH RADIATION AREA, and each access was not controlled in accordance with 10 CFR 20.203(c).

- C. 10 CFR 19.12 requires, in part, that all individuals working in a restricted area be instructed in the health protection problems associated with exposure to radioactive materials or radiation, in precautions or procedures to minimize exposure, and in the purposes and functions of protective devices employed.

Contrary to the above, during the period of August 19 through November 30, 1987, the licensee did not instruct at least seven individuals working in a restricted area near the Reactor Beam Port No. 1 in the radiological hazards associated with working in the area, the methods to be employed to reduce their exposure from the beam port, or the proper positioning of dosimetry to ensure accurate dose measurements.

Collectively, the above violations have been categorized as a Severity Level III violation (Supplement IV).

Cumulative Civil Penalty - \$5000 (assessed equally among the violations).

## II. Violation Not Assessed a Civil Penalty

10 CFR 50.59(a) requires, 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 change involves a change to the Technical Specifications or is an unreviewed safety question. An unreviewed safety question is created if the consequences of an accident or the malfunction of equipment important to safety previously evaluated may be increased.

10 CFR 50.59(b) requires that the licensee maintain records of changes in the facility to the extent that such changes constitute changes in the safety analysis report. These records shall include a written safety evaluation which provides the basis for the determination that the change does not involve an unreviewed safety question.

Contrary to the above, the licensee had not performed and documented a safety evaluation for a modification made to radioactive liquid effluent storage tank No. 3. Specifically, during the period January through December 1986 the licensee modified the drain line, which is described in Chapter IX of the safety analysis report, creating a potential unmonitored drain path by installation of an open ended drain line that contained only a single isolation valve. No evaluation was performed to evaluate this change to a single unlocked isolation valve even though all other potential drain paths contained double valve isolation or locked shut valves.

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

Pursuant to the provisions of 10 CFR 2.201, Texas A&M University 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. 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, (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 may be issued to show cause 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.

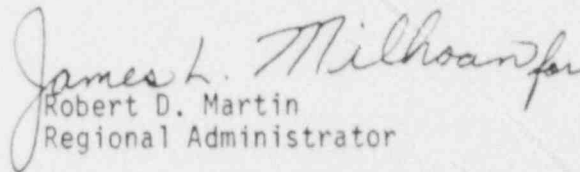
Within the same time as provided for the response required above under 10 CFR 2.201, the licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, or money order payable to the Treasurer of the United States in the amount of civil penalty proposed above, or the cumulative amount of the civil penalty, 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 an 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 an answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1988), 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 responses to the Director, Office of Enforcement, noted above (Reply to a Notice of Violation, letter with payment of civil penalty, 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. 20557 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV.

  
Robert D. Martin  
Regional Administrator

Dated at Arlington, Texas  
this *BK* day of *July* 1988.