

APPENDIX A
NOTICE OF VIOLATION

Metropolitan Edison Company

Docket No. 50-320

This refers to the inspection conducted by the TMI Program Office staff at Three Mile Island Nuclear Generating Station, Metropolitan Edison Company, Middletown, Pennsylvania, of activities authorized by NRC License No. DPR-73.

During this inspection, conducted on July 18-August 5, 1980, the following apparent items of noncompliance were identified.

- A. 10 CFR 20.101(a) states, "In accordance with the provisions of paragraph 20.102(a), and except as provided in paragraph (b) of this section, no licensee shall possess, use, or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter from radioactive material and other sources of radiation a total occupational dose in excess of the standards specified in the following table:

Rems per calendar quarter

1. Whole body; head and trunk; active blood-forming organs; lens of eyes; or gonads. 1 1/4
2. Hands and forearms; feet and ankles. 18 3/4
3. Skin of whole body 7 1/2."

Contrary to the above, on August 28, 1979, six individuals entered the Three Mile Island Nuclear Station (TMI)-Unit 2 fuel handling building north make-up valve room and received exposures greater than 7.5 rems to significant portions of their skin of the whole body. In addition, two of the six individuals received exposures in excess of 18.75 rems to the skin of their hands and forearms.

This is a Violation.

- B. 10 CFR 20.201(b) states, "Each licensee shall make or cause to be made such surveys as may be necessary for him to comply with the regulations in this part." 10 CFR 20.201(a) states, "As used in the regulations in this part, "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. When appropriate, such evaluation includes a physical survey of the location of materials and equipment, and measurements of levels of radiation or concentrations of radioactive material present."

Contrary to this requirement, such surveys as were necessary to assure compliance with Section 20.101, "Exposure of individuals to radiation in restricted area," were inadequate in that no evaluation of the hazards from beta radiation due to the presence of leaking primary coolant in the TMI-2 fuel handling building north make-up valve room was performed and as a result six individuals received exposures in excess of 10 CFR 20.101 limits.

This is an Infraction.

- C. 10 CFR 20.202 states in part, "Each licensee shall supply appropriate personnel monitoring equipment to, and shall require the use of such equipment by: 1. Each individual who enters a restricted area under such circumstances that he receives, or is likely to receive, a dose in any calendar quarter in excess of 25 percent of the applicable value specified in paragraph (a) of 20.101."

Contrary to the above, one individual entered the TMI-2 fuel handling building north make-up valve room on August 28, 1979, without appropriate extremity dose monitoring equipment. As a result of entries by this individual, extremity doses to the hands were later estimated to be 7.6 rem.

This is an Infraction.

- D. 10 CFR 20.401(a) states, "Each licensee shall maintain records showing the radiation exposures to all individuals for whom personnel monitoring is required under paragraph 20.202 of the regulations in this part. Such records shall be kept on Form NRC-5, in accordance with the instructions contained in that form or on clear and legible records containing all the information required by Form NRC-5. The doses entered on the forms or records shall be for periods of time not exceeding one calendar quarter."

Contrary to the above, exposure histories for six individuals involved in the August 28, 1979, maintenance operations in the TMI-2 fuel handling building north make-up valve room did not contain, as of June 27, 1980, either extremity doses or whole body doses as estimated by the TMI staff for the period August 1, 1979, to August 29, 1979.

This is a Deficiency.

- E. 10 CFR 19.13(d) states in part, "When a licensee is required pursuant to paragraph 20.405. . . of this chapter to report to the Commission any exposure of an individual to radiation or radioactive material, the licensee shall also provide the individual a report on his exposure data included therein. Such report shall be transmitted at a time not later than the transmittal to the Commission."

Contrary to the above, exposure reports containing the data submitted to the Commission were not supplied to individuals who received exposures on August 28, 1979, in excess of 10 CFR 20.101 limits and on other occasions at a time not later than the transmittal to the Commission. The report on the exposure to these individuals which was submitted to the NRC on September 28, 1979, was not given to the individuals involved until November 30, 1979.

This is an Infraction.

- F. The Order of Modification of License, dated July 20, 1979, states in part, "licensee shall maintain the facility in a shutdown condition in accordance with the approved operating and contingency procedure for the facility."

Three Mile Island Station Administrative Procedure 1003, Radiation Protection Manual, Revision 12, section 1.10.1 states in part, "each High Radiation Area (100 mRem/hr or greater). . .and an individual or a group of individuals permitted to enter such areas shall be provided with a radiation monitoring device which continuously indicates the radiation dose rate in the area."

Contrary to the above, on August 28, 1979, five individuals, at various times, entered the TMI-2 fuel handling building north make-up valve room containing dose rates in excess of 10 R/hr gamma fields without a continuous indication dose rate instrument.

This is an Infraction.