

APPENDIX A

NOTICE OF VIOLATION

Metropolitan Edison Company

Docket No. 50-289

Based upon the results of the NRC evaluation conducted on July 28 through August 8, 1980, it appears that certain of your activities were not conducted in full compliance with NRC regulations as indicated below. Items A thru E are Infractions.

- A. 10 CFR 20.103(c), "Exposure of individuals to concentrations of radioactive materials in air in restricted areas" requires in part that: When respiratory protective equipment is used to limit the inhalation of airborne radioactive material pursuant to paragraph (b)(2) of this section, the licensee may make allowance for such use in estimating exposure of individuals to such materials provided that such equipment is used as stipulated in Regulatory Guide 8.15, "Acceptable Programs for Respiratory Protection."

Section C.4 of Regulatory Guide 8.15 states in part, "The licensee is to maintain and implement a respiratory protection program that includes, as a minimum...d. Written procedures for maintenance to ensure full effectiveness of respiratory protective equipment, including procedures for cleaning and disinfection, decontamination, inspection, repair and storage..."

1. Contrary to this requirement, as of August 1, 1980, allowance was made for the use of respiratory protective equipment, but written procedures for performing periodic maintenance on self-contained breathing apparatus (SCBA) units and air-line respirator regulators were not approved and implemented. This lack of approved, detailed programmatic guidance contributed directly to a) the unavailability of records documenting periodic maintenance reportedly being performed and b) the licensee's failure to recognize the necessity for performing periodic calibration/maintenance of airline respirator pressure regulators.
2. Contrary to this requirement, as of August 1, 1980, allowance was made for the use of respiratory protective equipment, but procedures for filling the SCBA air bottles, using either the Eagle or Mako breathing air compressors did not exist. Operating procedures/instructions for these compressors are necessary to assure: a) the safety of personnel operating the high pressure air compressors, and b) performance of proper, periodic maintenance of the compressors to ensure continued capability of supplying high quality breathing air.

- B. Technical Specifications 6.11 requires that procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

Unit 1 Radiological Controls Procedure No. 1616.2, "Respiratory Protection Effectiveness," Revision 0, dated October 9, 1979, developed pursuant to the above requirement specifies that the respiratory protection program must be reviewed on a continuing basis and the review must include such areas as wearer acceptance, examination of respirators in use, comments, evaluation of protection afforded and records. In addition, the procedure states in part, in Section 5.0, "Operating Instructions," "The Respiratory Protection Supervisor shall conduct a program designed to review the effectiveness of the Respiratory Protection Program..." Section 5.2, Examination of Respirators in Use, states in part, "A random inspection shall be conducted monthly by the Respiratory Protection Supervisor to assure that respirators are properly selected, used, cleaned and maintained, and to assure that the users have been trained in the use of respiratory devices...."

Contrary to the above, based on discussions with the individual responsible for overseeing the respiratory protection program in Unit 1 (Supervisor, Radiological Engineering) it was determined that as of the time of the NRC Health Physics Evaluation, Procedure No. 1616.2 had not been implemented in that, the program was not being audited as required and no other mechanism was ongoing to provide timely management overview to evaluate the full effectiveness of the respiratory program.

- C. 10 CFR 71.12 states, "A general license is hereby issued to persons holding a general or specific license issued pursuant to this chapter, to deliver licensed material to a carrier for transport, provided the licensee has a quality assurance program, whose description has been submitted to and approved by the Commission as satisfying the provision of 10 CFR 71.51." 10 CFR 71.51 requires the licensee to establish, maintain and execute a quality assurance program satisfying each of the applicable criteria specified in Appendix E, "Quality Assurance Criteria for Shipping Packages for Radioactive Material," of that part.
1. 10 CFR 71, Appendix E, Criteria 10 states in part, "A program for inspection of activities affecting quality shall be established and executed ... to verify conformance with the documented instructions, procedures... Such inspection shall be performed by individuals other than those who performed the activity being inspected.... If mandatory inspection hold points, which require witnessing or inspecting by the licensee's designated representative and beyond which work shall not proceed without the consent of its designated representative, are required, the specific hold points shall be indicated in appropriate documents."

Contrary to the above, on June 5 and 30, 1980, two radioactive waste shipments (Nos. 80-49 and 80-56) were delivered to a carrier for transport without mandatory QA inspection hold points being witnessed. The QA hold points were intended to assure compliance with package Certificates of Compliance and package lid closure.

2. 10 CFR 71, Appendix E, Criteria 12 states in part, "Measures shall be established to assure that tools, gages, instruments, and other measuring and testing devices used in activities affecting quality are properly controlled, calibrated and adjusted at specified intervals to maintain accuracy within necessary limits."

Contrary to the above, as of the time of the NRC Health Physics Evaluation, no measures were established to assure that torque wrenches, used to torque package lids to shipping casks, an activity affecting quality, were properly controlled, calibrated and adjusted. The licensee's contractor loading and package closing procedure for shipment of licensed material provided lid torque limits and tolerance values.

- D. Technical Specification 6.8, "Procedures," requires in Section 6.8.1 that written procedures and administrative policies shall be established, implemented and maintained that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANSI N18.7 - 1972 and Appendix "A" of USNRC Regulatory Guide 1.33, November 1972.

Regulatory Guide 1.33, November 1972 recommends in Section A.5 that procedures be developed for procedure review and approval, recommends in Section G.5 that procedures be developed for personnel monitoring and recommends in Section J that procedures be developed for chemical and radiochemical analyses which specify laboratory instructions and calibration of laboratory equipment. Administrative Procedure No. 1001, "TMI Document Control," Revision 21, developed pursuant to the above states in part, in Enclosure 8, "Station Health Physics Procedures," "2.0 Responsibilities ... The Unit Superintendents will approval all Health Physics Procedures ... The PORC will review all 1600 Series Health Physics Procedures" and states in part in Enclosure 9, "Station Chemistry Procedures," "2.0 Responsibilities ... The Unit Superintendents will approval all Plant Chemistry Procedures ... The PORC will review all 1900 Series Plant Chemistry Procedures."

Contrary to the above, as of July 28, 1980, no Unit Superintendent approved or PORC reviewed procedures were being used for operation, calibration and Quality Assurance of the whole body counter, a device used for personnel monitoring, or for the Unit 2 contractor laboratory counting equipment. The contractor counting equipment was being used to analyze samples of effluents being released from Unit 1.

- E. 10 CFR 20.201, "Surveys," states in Paragraph (b), "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." A survey as defined in Paragraph 20.201(a) 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."

10 CFR 20.202, "Personnel Monitoring" states in part in Paragraph (a) that "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 10 CFR 20.101. ... (3) Each individual who enters a high radiation area."

Contrary to the above, as of July 28, 1980, the licensee had not determined if appropriate extremity monitoring devices were being provided to individuals. The devices provided were TLD ring badges that were supplied, processed and quality controlled entirely by the vendor. The licensee had not performed any evaluation of the adequacy of the device or the processing capabilities of the vendor to determine if the device and the vendor's processing were acceptable and capable of evaluating personnel extremity exposure due to the presence of radioactive materials. The licensee routinely issues the devices to personnel who may sustain extremity exposure.