

NOTICE OF VIOLATION

Susquehanna Steam Electric Station Unit 2
Berwick, Pennsylvania

Docket No. 50-388
License No. NPF-22
EA 89-182

During a special NRC inspection conducted on September 1-2, 1989, 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 (1989), the particular violations are set forth below:

- A. 10 CFR 20.201(b) requires, in part, that each licensee make or cause to be made such surveys as may be necessary to comply with the regulations of 10 CFR Part 20. 10 CFR 20.201(a) defines a survey, in part, as 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 present.

Contrary to the above, on August 31, 1989, surveys were not made to assure compliance with 10 CFR 20.101, which requires that no licensee possess, use or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in a calendar quarter from radioactive material and other sources of radiation a total occupational dose in excess of the limits set forth therein. Specifically, a contractor technician and a chemistry technician retrieved a filter (sample medium) that had been collecting radioactive material from the reactor coolant via a sampling rig located at the chemistry sampling station; however, prior to the sampling rig being disassembled and the sample medium being handled, a radiation survey was not made to determine the levels of radiation emanating from the sample medium.

- B. 10 CFR 19.12 requires, in part, that all individuals working in or frequenting any portion of a restricted area be kept informed of radiation in such portions of the restricted area and be instructed in precautions or procedures to minimize exposure to radioactive materials.

Contrary to the above, on August 31, 1989, two individuals working in a restricted area (a contractor technician and a chemistry technician who were collecting a sample from a sampling rig located at the chemistry sampling station) were not adequately instructed in precautions or procedures to minimize exposure to radioactive materials. Specifically, the individuals were not informed that the sample being collected was a different type of sample from that which was normally collected (and as such, would exhibit significant contact radiation dose rates), nor were the individuals provided any special instructions, precautions, procedures or guidance to minimize their radiation exposure during collection of the sample.

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- C. Technical Specification 6.11 (Radiation Protection Program) requires that procedures for personnel radiation protection be prepared consistent with the requirements of 10 CFR Part 20 and be approved, maintained and adhered to for all operations involving personnel radiation exposure.

Section 4.10 of Radiation Protection Procedure AD-00-705, Revision 12 (Access Control and Radiation Work Permit System), dated March 16, 1989, states that it is the responsibility of each radiation worker to understand and comply with all health physics access control and radiation work permit (RWP) requirements. Signature on the RWP sign-in sheet indicates knowledge of the radiological conditions in the work area and the requirements of the RWP.

RWP No. 89-452, (Obtain Chemistry Samples, Analyze Samples in the Hot Chemistry Lab and Perform Sample Preparation as Necessary), dated July 31, 1989, required individuals to (1) wear a lab coat, surgeon's gloves and cotton glove liners when sampling radioactive systems; (2) possess a survey meter to measure the radiation dose rate of samples prior to transport and to be used while transporting samples measuring 100 mR/hr or greater; (3) possess a shielding pig to transport samples measuring 100 mR/hour or greater on the outside of the sample container; and (4) obtain or provide constant health physics coverage when transporting samples with 100 mR per hour or greater on the outside of the sample transport container.

Contrary to the above, on August 31, 1989, a contractor technician and chemistry technician, who had signed the sign-in sheet for RWP 89-452, collected a radioactive sample under the authority and requirements of RWP No. 89-452 without complying with the RWP requirements, as evidenced by the following examples:

1. the contractor technician who collected the sample did not wear a lab coat and cotton glove liners while collecting the sample;
2. although the sample was subsequently determined to have a contact radiation dose rate of more than 100 mR/hr (600 mR/hr), a survey meter was not obtained and used to determine the dose rate on the sample either prior to, or during transport of the sample;
3. although the sample container had a radiation dose rate of more than 100 mR/hr (600 mR/hr) on the outside of the sample container, a shielding pig was not used to transport the sample; and
4. although the sample transport container had a radiation dose rate of more than 100 mR/hr on the outside, constant health physics coverage was not provided during the transport of the sample.

- D. Technical Specification 6.8 (Procedures and Programs) requires, in part, that the procedures recommended in Appendix A of Regulatory Guide 1.33, 1978, be established and implemented.

Section 10 of Appendix A of Regulatory Guide 1.33, 1978, specifies that chemical and radiochemical procedures be written to prescribe the nature and frequency of sampling and analyses, and should include laboratory instructions and calibration of equipment.

Contrary to the above, as of August 31, 1989, procedures were not developed for prescribing the nature and frequency of the sampling of reactor coolant using the resin impregnated filter medium, nor for calibrating the equipment used.

These violations have been categorized in the aggregate as a Severity Level III problem. (Supplement IV)

Pursuant to the provisions of 10 CFR 2.201, Pennsylvania Power and Light Company is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a copy to the Regional Administrator, Region I 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By
W. T. RUSSELL
William T. Russell
Regional Administrator

Dated at King of Prussia, Pennsylvania
this 1st day of November 1989