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July 16, 1974

Mr. James P. O'Reilly, Director
Directorate of Regulatory Operations
Region I
U. S. Atomic Energy Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Subject: Abnormal Occurrences:
74-12 Leak in the socket weld of the 3/4" vent pipe to vent valve on the charging pump discharge filter bypass line, and
74-13 Leak in the socket weld of the 3/4" vent pipe to the weldolet on the charging pump discharge filter bypass line.
R. E. Ginna Nuclear Power Plant, Unit No. 1
Docket No. 50-244

8/2/74

Dear Mr. O'Reilly:

In accordance with Technical Specifications, Article 6.6.2a, the attached reports of Abnormal Occurrences numbers 74-12 and 74-13 are hereby submitted. These two occurrences are being reported at the same time because the leaks occurred in the same piping section.

The first leak, observed on June 29, 1974, appeared to have been caused by a corrosion mechanism which may have been aided by sensitization of the valve material.

The second leak, observed on July 2, 1974, was caused by a void found to have been formed due to improper surface preparation of the weldolet on the bypass line.

This letter constitutes an interim report. Approval for a one-week delay in the submission of these reports had been provided by telephone on July 8, 1974 by Mr. J. Hannon of the USAEC-DRO Region I Staff, in anticipation of a metallurgical investigation of the material involved in the first leak. Reports of this investigation and a stress analysis as specified in paragraph 7 of the report of Abnormal Occurrence 74-13 have not been received. A subsequent report will be submitted after review of these analyses.

Very truly yours,

Keith W. Amish

Enclosures

1. Report Number: 50-244/74-12

2a. Report Date: July 16, 1974

2b. Occurrence Date: June 29, 1974

3. Facility: R. E. Ginna Nuclear Power Plant, Unit No. 1

4. Identification of Occurrence:

This abnormal occurrence is defined by Technical Specifications Article 1.9e: Abnormal degradation of one of the several boundaries designed to contain radioactive materials resulting from the fission process.

5. Conditions Prior to Occurrence:

The plant was operating at 70% power.

6. Description of Occurrence:

At about 0830 hours on June 29, 1974, the auxiliary operator noticed a slight vapor in the charging pump room in the Auxiliary Building. He notified the shift foreman, and the shift foreman and auxiliary operator made an inspection in the charging pump room. A leak was discovered in the charging pump discharge filter piping in the weld that connects a 3/4" vent valve to a 3/4" nipple located on a 3" bypass line on top of the filter. Control Room operators checked the Auxiliary Building particulate and gas monitors and the charging pump room area monitor. No increases in radioactivity were indicated. A health physics technician placed a portable air monitor in service in the charging pump room to obtain local air concentrations. The plant superintendent was notified and a Plant Operations Review Committee meeting was called at 1130 hours.

7. Designation of Apparent Cause of Occurrence:

The leak appears to have been caused by a corrosion mechanism which may have been aided by a sensitized condition of the valve.

8. Analysis of Occurrence:

Since the weld was sound, a corrosion mechanism occurring in the valve material would not result in a major weld failure. There was no evidence of further degradation to the socket weld. Thus, there were no consequences or potential consequences from the standpoint of public health and safety.

There was no indication of an increase of radioactivity on the Auxiliary Building particulate or gas monitor. The local air concentration for short-lived isotopes was 1% of MPC. The exposure dose rates during the repair varied between 10 and 30 mr/hour with the maximum dose received being 50 mr by the Quality Assurance Engineer (Welding and NDE) who investigated and supervised the weld repair.

9. Corrective Action:

The PORC recommended that EM-24, Repair of Charging Pump Filter Piping Leak, Rev. 1 be used. They also recommended that a new 3/4" vent valve

be installed after cutting the nipple approximately 1" below the valve to remove the vent valve. The 3/4" weld at the weldolet was examined with dye penetrant and was found to be free of defects. See Abnormal Occurrence Report 74-13 for further information.

10. Failure Data:

On May 28, 1971, as reported in the third Semiannual Report under Shutdowns, there was a leak in a socket weld in the 3/4" drain line from the inlet manifold to the charging pump filter from the 1B charging pump. This failure was caused by intergranular corrosion due to heavy sensitizing when overheated during the initial filter installation. This had been repaired by cutting off and capping the ends.

On December 11, 1973, as reported in the eighth Semiannual Report under Shutdowns, there was a leak in a socket weld that connects the 3/4" nipple for the vent to the welding fitting (weldolet) on the 3" filter bypass line. This failure was caused by a pinhole defect in the weld.