

ENCLOSURE

Metropolitan Edison Company
Three Mile Island Nuclear Station Unit (TMI-1)
Docket No. 50-289
Operating License No. DPR-50
Nonroutine 30-Day Environmental Report 75-01

Report of an Anomalous Measured Level of Radioactivity

Description of Measured Level

A monthly composite of weekly grab samples of surface river water collected about 1/2 mile downstream from the TMI-1 river discharge had a total tritium activity of 1.67×10^{-6} $\mu\text{Ci/cc}$ as reported to Met-Ed on March 21, 1975. This value is greater than four times the control station value of 2.5×10^{-7} $\mu\text{Ci/cc}$, which was determined by Met-Ed's consultants during the station pre-operation period.* The next river water sample analyzed from the same station location showed that the tritium level was normal.

Possible Cause

Discharges are made from the TMI-1 Liquid Waste Condensate Storage Tanks on an irregular schedule based on unit operating conditions. Weekly grab samples for the radiological environmental monitoring program are taken on a regular basis. It is believed that the grab samples which were composited to form this sample were taken during periods of condensate storage tank discharge and, accordingly, during periods of higher-than-normal river water tritium level.

Analysis of Measured Level

It is believed that neither the health nor safety of the public was threatened by this occurrence represented by this sample in that:

- a. The level of tritium activity was less than 1/1000th of the Maximum Permissible Concentration level given in 10 CFR 20 for members of the public.
- b. The level of tritium activity at the nearest downstream source of continuous public use was a background level (1.63×10^{-7} $\mu\text{Ci/cc}$).
- c. No Technical Specification limits were exceeded.
- d. The event resulted from normal unit operations as described in the TMI-1 Final Safety Analysis Report.

* In our report of December 24, 1974, a value of 5.2×10^{-7} $\mu\text{Ci/cc}$ was given as the control station value. This value is actually the Preliminary Reporting Level, an internally-generated notification level at which Met-Ed performs in-house investigations regarding the measured level of radiation. It should also be noted that using the proper value of 2.5×10^{-7} $\mu\text{Ci/cc}$, the total tritium activity of the sample described in the December 24 letter was actually in excess of ten times the control station value.

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Corrective Actions

The discharge of effluents from the Condensate Storage Tank is a normal process associated with unit operations and is described in the Final Safety Analysis Report. Additional monitoring is planned so that the average activity level may be more accurately determined at the point of discharge.

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